

MANUFACTURERS RECORD

A Weekly Newspaper Devoted to the Industrial, Financial, Railroad,
Mining, Contracting, Engineering, Building, and General
Business Interests of the South and Southwest

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Iron and Steel Institute.

Southern Bankers and the Southern Railway's Plans
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Thrift.

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Classified Opportunities. Pages 72, 73 and 74.

BALTIMORE, AUGUST 25, 1910

CLINCHFIELD GROWTH

The Clinchfield Coal Corporation has been helped by the demand for it, as measured by its sales. Clinchfield stands high in the estimation of coal buyers. The tonnage under contract to date is slightly more than double the tonnage contracted down to date. The mines of the Clinchfield Coal Corporation, operating six days per week, during May, 1910, the dullest month of the year, supplied a net profit more than during May, 1909. Although extensive preparations were made to increase largely the output of the mines, the output have kept pace with the development. It is certain that the entire tonnage will have been placed in the market by the end of the year. When the season of selling closed August 1st, because no more tonnage was available. Further development work is being done in an extensive way to provide tonnage for shipment through the port of Charleston for export and coastwise movement. There are awaiting markets for several million tons in this direction alone, in Cuba, Mexico, South America and the West Indies, besides the coastwise ports bordering the Gulf of Mexico.

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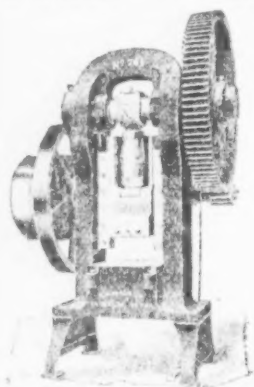
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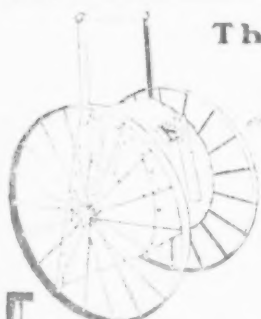
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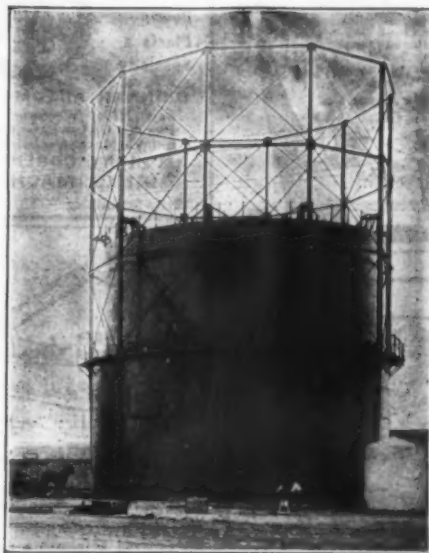
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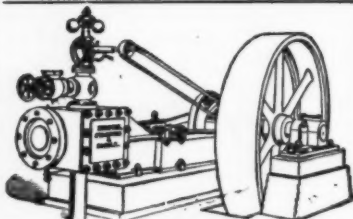
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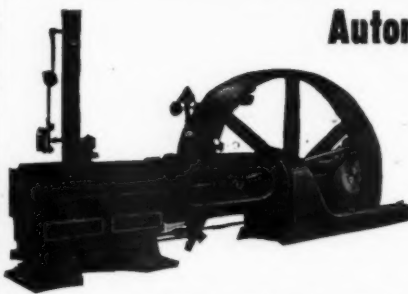
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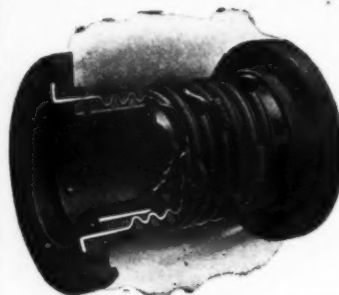
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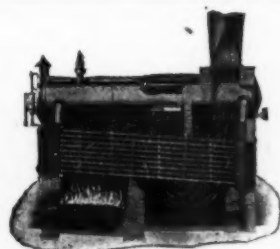
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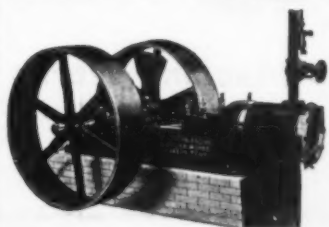
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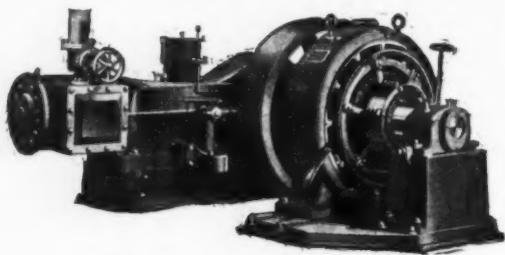
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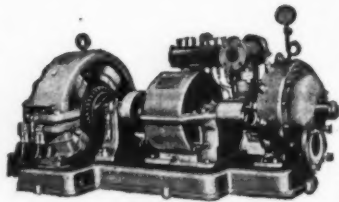
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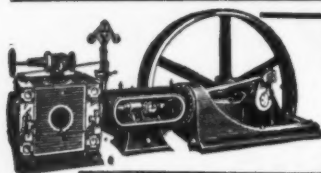
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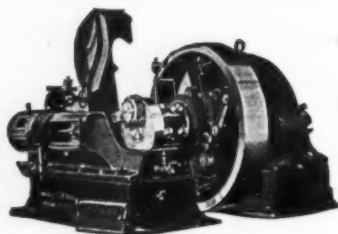


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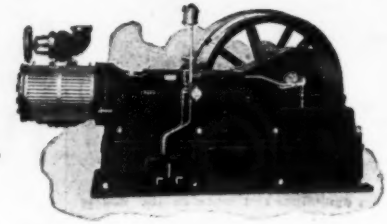
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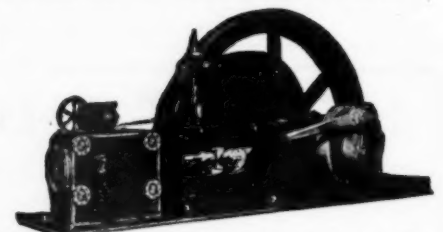
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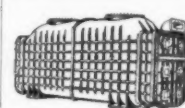
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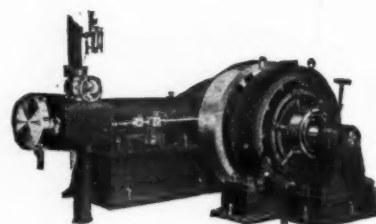
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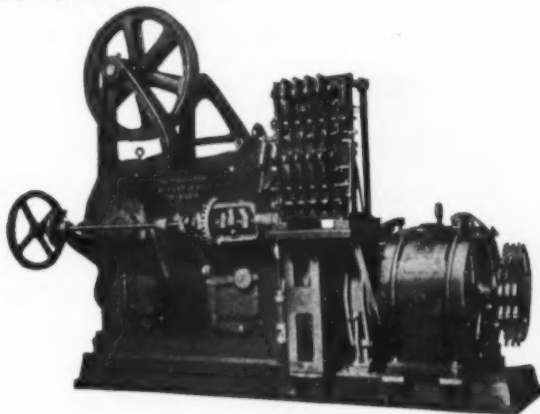
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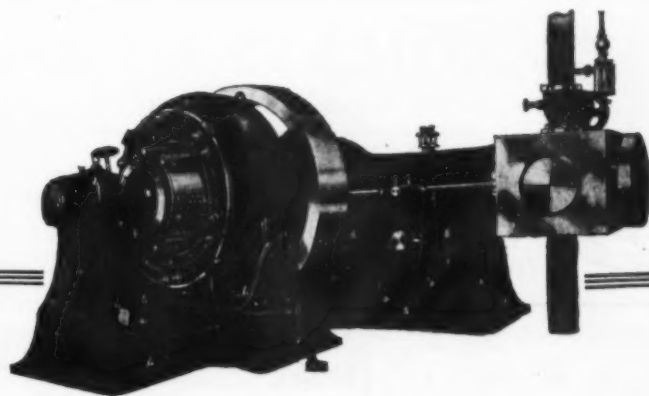
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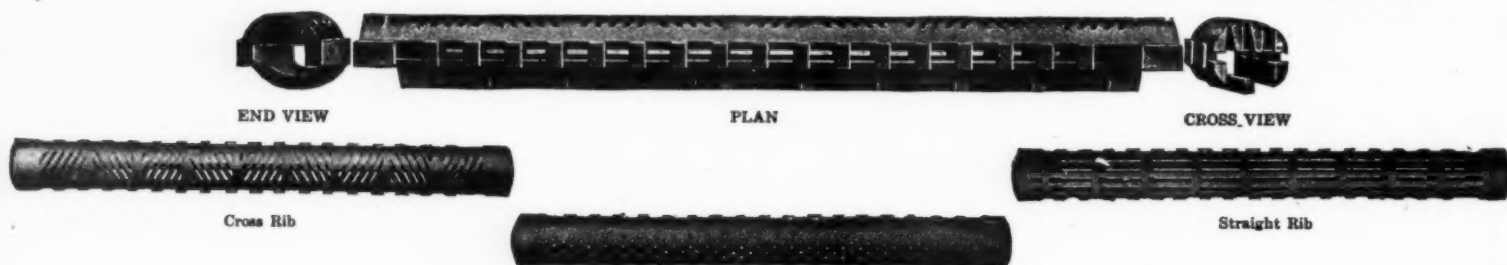
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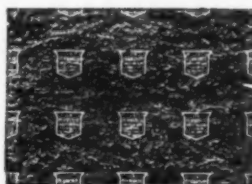
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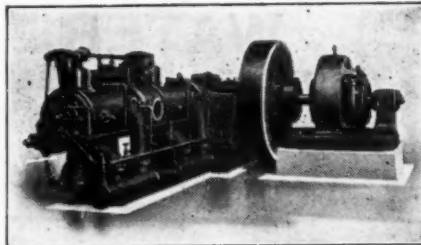
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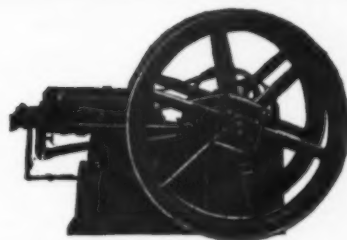
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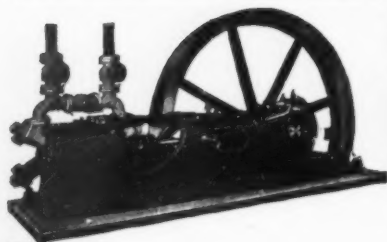
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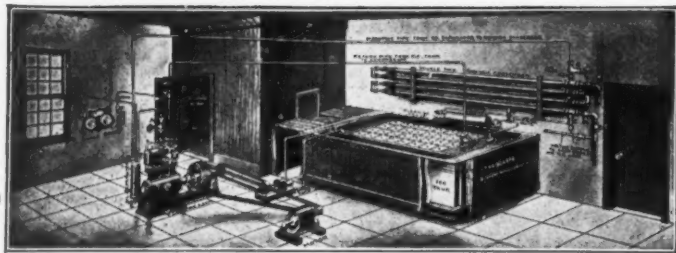
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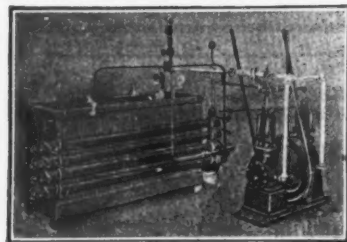


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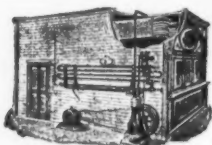
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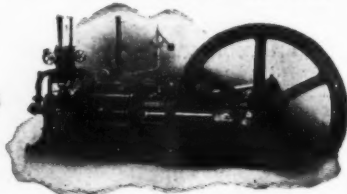
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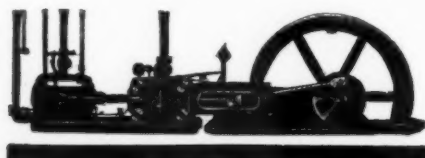
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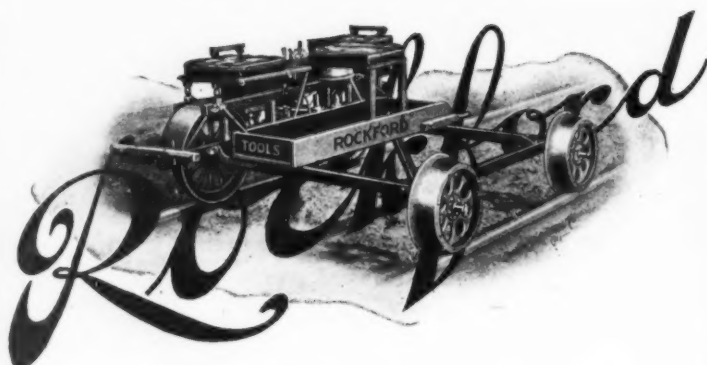
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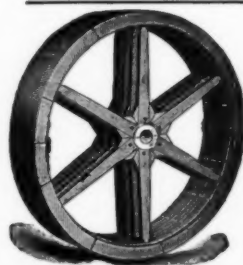
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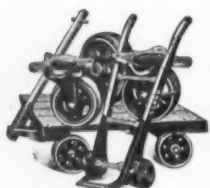
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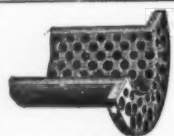
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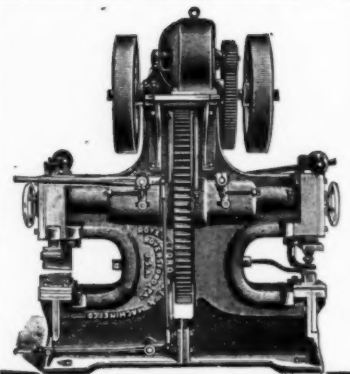
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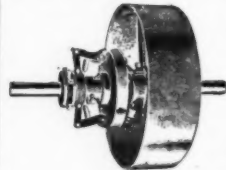


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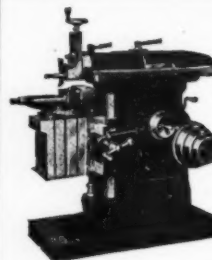
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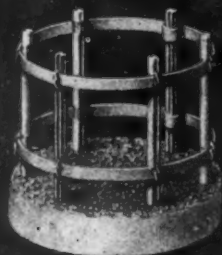
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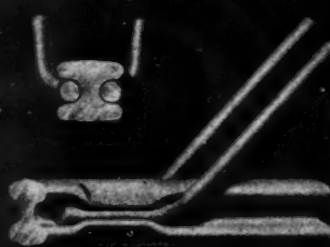
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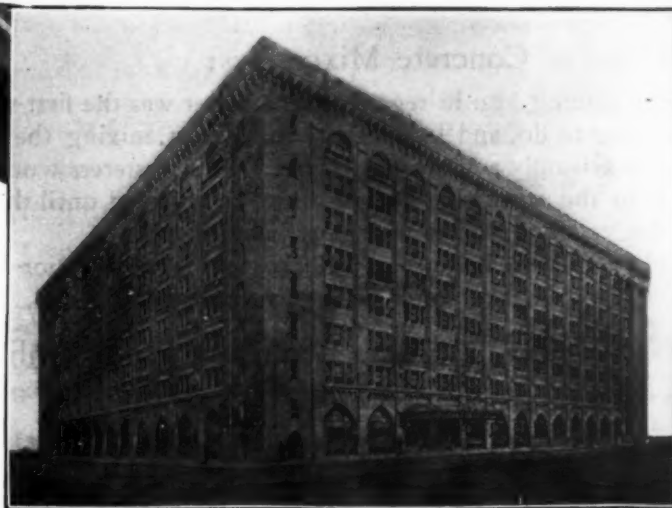
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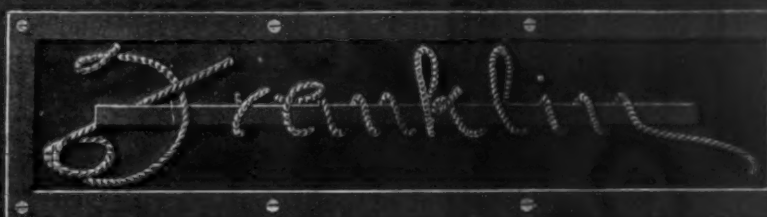
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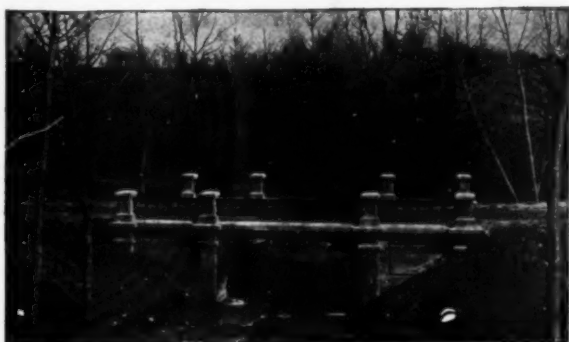
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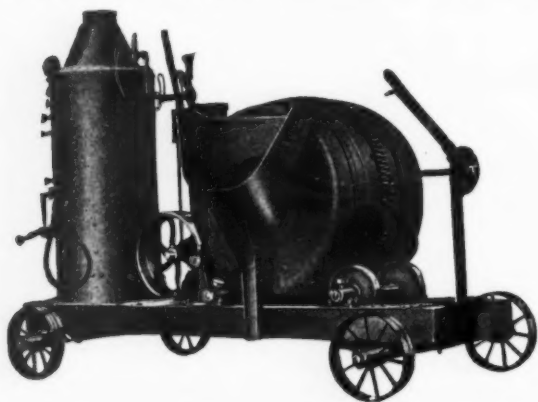
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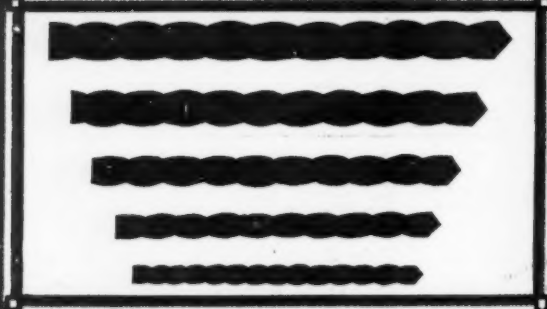
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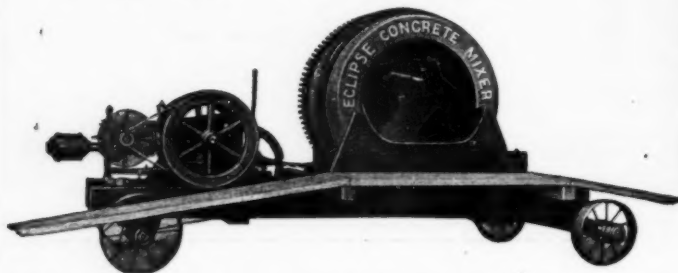
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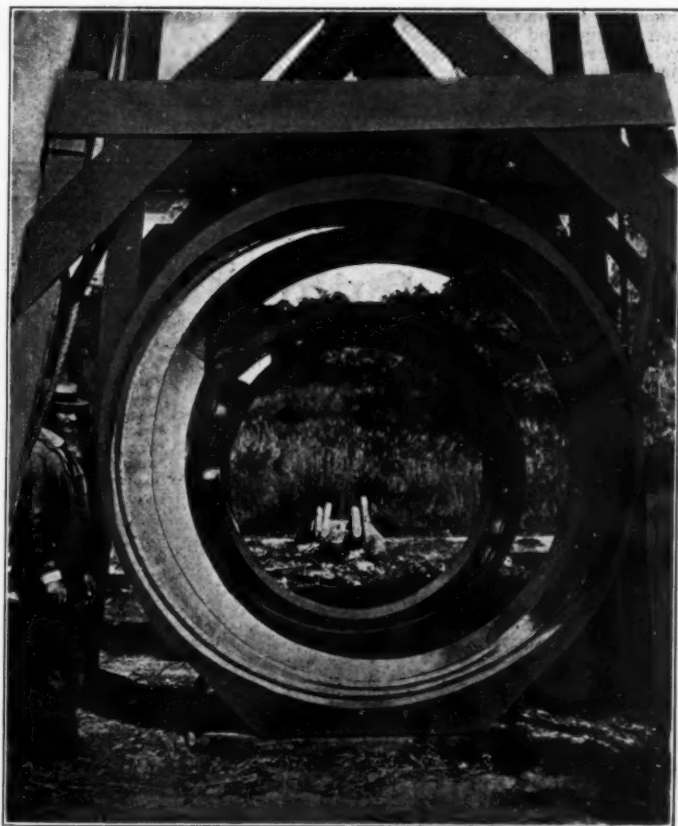
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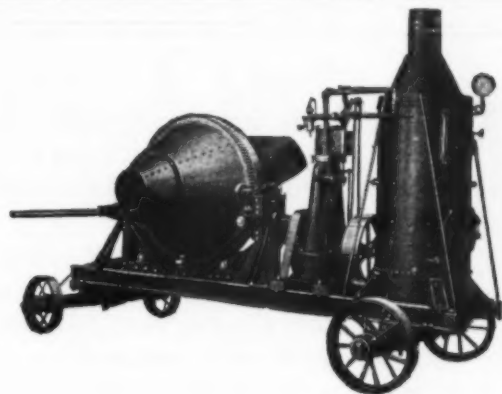


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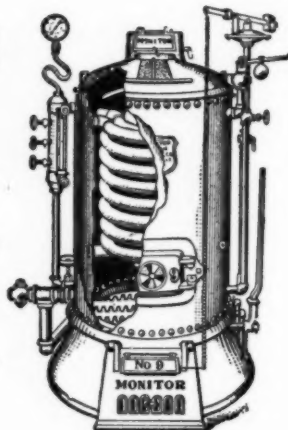
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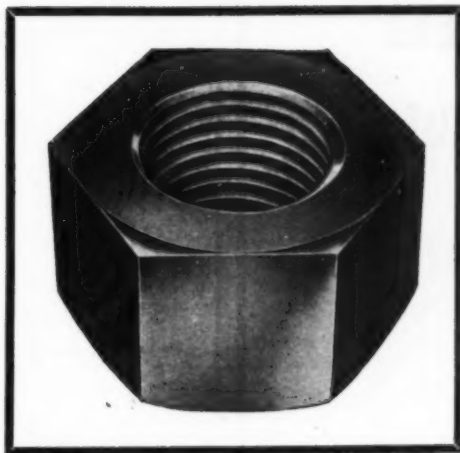
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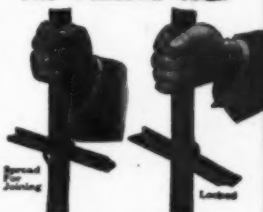
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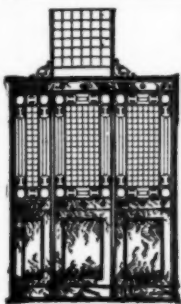
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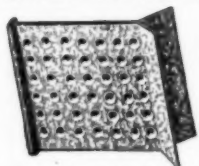


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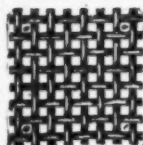
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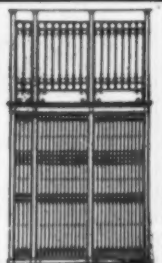
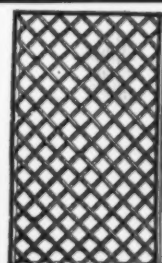
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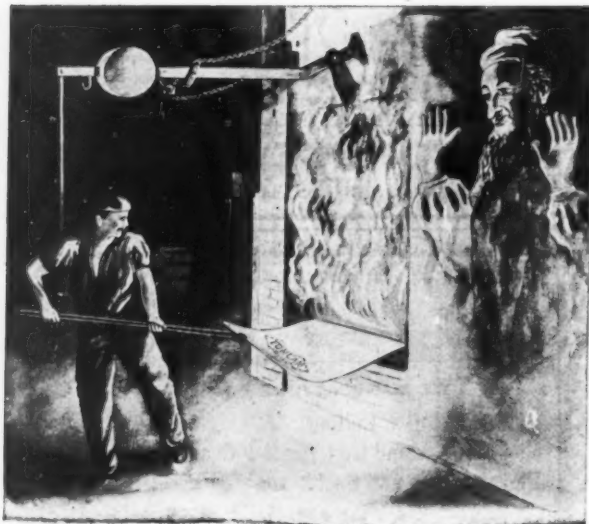
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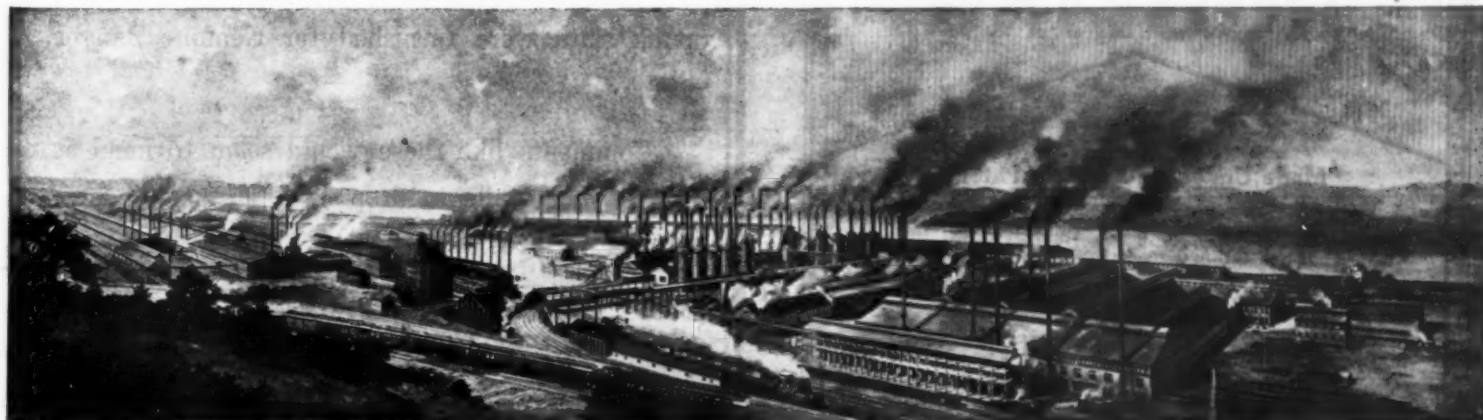
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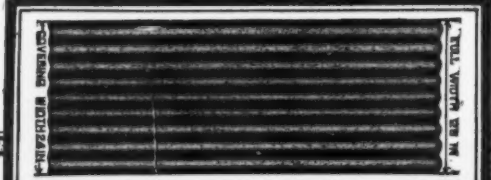
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"Fires that start on roofs of buildings are different from other fires. . . There is no device to protect property owners against delays in the discovery of fires on roofs—except a roofing material that will not support combustion."

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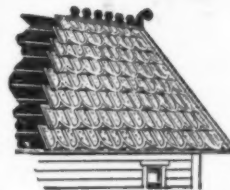
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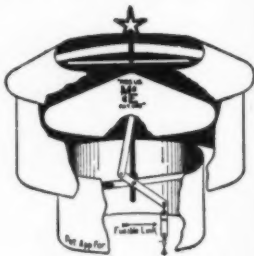
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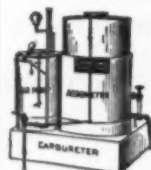
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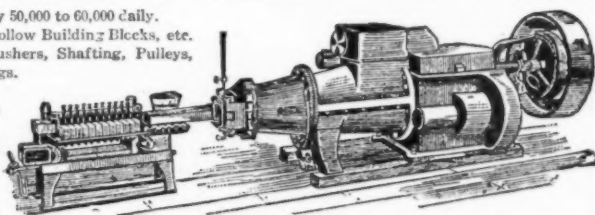
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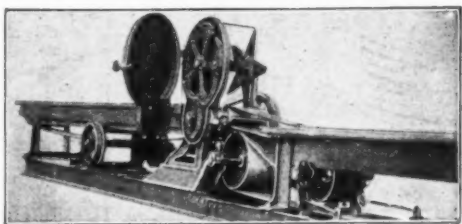
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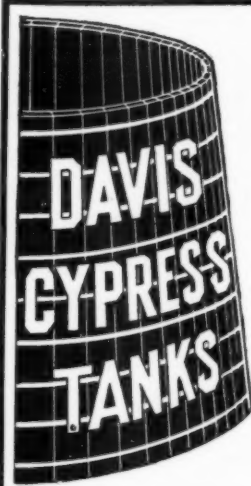
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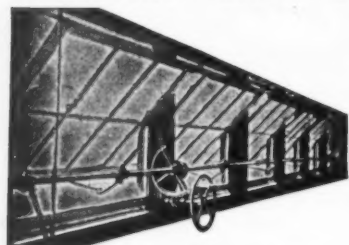
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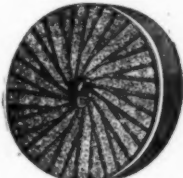
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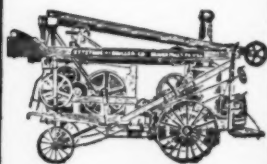
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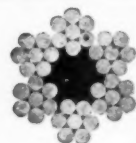
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VOL. LVIII. No. 7.
WEEKLY.

BALTIMORE, AUGUST 25, 1910

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ond-class matter.]

BALTIMORE, AUGUST 25, 1910.

Mr. J. R. Adams of Birmingham, Ala.,
referring to the time when prosperity
came to him at every move, writes:

I lived in Montgomery, the State capital,
and was a constant reader of your paper, the
MANUFACTURERS RECORD, and if letters to
you were filed, you will doubtless find many
from me in which I commended you and
your journal for the noble work you were
doing for our loved South. I was with the
"Boys in Gray," '61-'65, and after we had been
forced by superior numbers to lay down our
arms you nobly came to the rescue of our
poverty-stricken people, and through your
influence encouraged our people to turn their
attention and efforts to manufacturing. You
are still "at it," and the result has brought
great blessings to our people, and will yet
convince the world that we are indomitable.

SUGGESTIONS FROM THE 1910 CENSUS.

At this writing returns of something
more than 10,973,000 of the population
of the United States in 1910 has been
announced. The total includes but two
States complete, Rhode Island, the most
densely populated State in the country,
with an average of 508 persons to the
square mile, and Oklahoma, the young-
est organized State, with a population
averaging something more than 23 per-
sons to the square mile, eighty-eight in-
corporated towns and cities and sev-
enty-nine counties. The total, elimi-
nating duplications of the population of
incorporated places counted in the total
of counties or of States, is in the neigh-
borhood of one-eighth of the total popu-
lation of the country, not including
island possessions. Though sufficient
typical statistics have not yet been an-
nounced to justify accurate deductions,
the exhibit offers a basis for interesting

suggestions. The population of two
States, comparing 1900 and 1910, and
showing the rate of increase, follows:

States.	1910.	1900.	P. Ct.
Oklahoma.....	1,651,951	790,391	109.
Rhode Island.....	542,674	428,556	26.6

Other figures, comparing for the ten
years twenty-one cities of more than
100,000 population, seventeen cities be-
tween 50,000 and 100,000, twenty-five
cities between 10,000 and 50,000, and
twenty-five cities under 10,000, follow:

More Than 100,000 Population.

	1910.	1900.	P. Ct.
St. Louis, Mo.....	687,029	575,238	19.4
Pittsburg, Pa.....	533,905	451,512	18.2
Detroit, Mich.....	465,766	285,704	63.
Milwaukee, Wis.....	373,857	285,315	31.
Cincinnati, Ohio.....	364,463	325,902	11.8
Newark, N. J.....	347,469	246,079	41.2
Washington, D. C.....	331,069	278,718	18.8
Jersey City, N. J.....	267,779	206,433	29.7
Kansas City, Mo.....	248,381	165,753	51.7
Indianapolis, Ind.....	233,659	169,164	38.1
Providence, R. I.....	224,336	175,597	27.8
St. Paul, Minn.....	214,744	163,065	31.7
Columbus, Ohio.....	181,548	125,590	44.6
Toledo, Ohio.....	168,497	131,822	27.8
Atlanta, Ga.....	154,839	89,872	72.3
Syracuse, N. Y.....	137,249	108,574	26.6
New Haven, Conn.....	133,005	108,127	23.7
Scranton, Pa.....	129,867	102,026	27.3
Grand Rapids, Mich.....	112,571	87,565	29.
Bridgeport, Conn.....	102,054	70,996	43.7
Albany, N. Y.....	100,253	94,151	6.5
Totals.....	5,532,931	4,244,972	30.3

Between 50,000 and 100,000.

	1910.	1900.	P. Ct.
Hartford, Conn.....	98,915	79,850	23.9
Reading, Pa.....	96,071	78,561	21.7
Camden, N. J.....	94,538	75,935	24.3
Wilmington, Del.....	87,411	76,598	14.3
Des Moines, Iowa.....	86,308	62,139	39.
Houston, Tex.....	78,899	44,633	76.6
Waterbury, Conn.....	73,141	45,859	59.6
Schenectady, N. Y.....	72,826	51,682	42.9
Hoboken, N. J.....	70,524	59,364	18.8
Evansville, Ind.....	69,647	59,007	18.
Akron, Ohio.....	69,067	42,628	61.6
Oklahoma City, Okla.....	64,206	10,037	539.6
Fort Wayne, Ind.....	63,933	45,115	41.7
East St. Louis, Ill.....	59,000	29,655	98.9
Bayonne, N. J.....	55,545	32,722	69.7
South Bend, Ind.....	53,684	35,999	49.1
Allentown, Pa.....	51,915	35,416	46.6
Totals.....	1,245,530	845,510	47.3

Between 10,000 and 50,000.

	1910.	1900.	P. Ct.
Sioux City, Iowa.....	47,828	33,111	44.4
Sacramento, Cal.....	44,636	29,282	52.6
Pueblo City, Col.....	44,356	28,157	57.6
Davenport, Iowa.....	43,028	35,254	22.1
Woonsocket, R. I.....	38,125	28,304	35.1
Niagara Falls, N. Y.....	39,445	19,457	56.5
Lynchburg, Va.....	35,494	18,891	56.1
Colorado Spgs., Col.....	29,078	21,085	37.9
Danville, Ill.....	27,871	16,354	69.5
Newport, R. I.....	27,149	22,034	23.2
Muskogee, Okla.....	25,278	14,418	76.
Rock Island, Ill.....	24,335	19,493	24.8
Moline, Ill.....	24,199	17,248	40.3
Cumberland, Md.....	21,839	17,128	27.5
Jackson, Miss.....	21,262	7,816	172.
Tulsa, Okla.....	18,182	1,330	1288.0
Ann Arbor, Mich.....	14,817	14,599	2.
Harrison, N. J.....	14,498	10,596	36.5
Enid, Okla.....	13,799	3,444	300.7
Middletown, Ohio.....	13,152	9,215	64.4
McAlester, Okla.....	12,954	4,125	214.
Sault St. Marie, Mich.....	12,615	10,538	19.7
Temple, Tex.....	10,993	7,065	55.6
Brownsville, Tex.....	10,517	6,305	63.8
San Angelo, Tex.....	10,321	.....	.....
Totals.....	610,870	395,119	54.6

Under 10,000.

	1910.	1900.	P. Ct.
Abilene, Tex.....	9,204	3,419	169.7
Bloomington, Ind.....	8,838	6,460	36.8
Ardmore, Okla.....	8,618	5,681	51.7
Lansford, Pa.....	8,321	4,888	70.4
Sapulpa, Okla.....	8,300	891	831.5
Corpus Christi, Tex.....	8,293	4,703	76.4
Lawton, Okla.....	7,788	5,562	40.
Marion, Ill.....	7,003	2,510	182.2
Minot, N. D.....	6,188	1,277	384.5
New Decatur, Ala.....	6,118	4,337	37.8
Henderson, Conn.....	5,859	4,626	26.4
Fitzgerald, Ga.....	5,795	1,811	218.9
Stanton, Ill.....	5,048	2,786	81.2
Bonham, Tex.....	4,844	5,042	-3.9
Denton, Tex.....	4,732	4,187	13.
Opelousas, La.....	4,623	2,951	56.6
Decatur, Ala.....	4,288	3,114	37.7
Longmont, Col.....	4,256	2,291	93.2
Kentwood, La.....	3,609	1,313	174.8
Hawkinsville, Ga.....	3,429	2,103	62.6
Glen Ridge, N. J.....	3,360	1,969	69.3
Buena Vista, Va.....	3,245	2,338	39.3
Russellville, Ky.....	3,111	2,591	20.
Carson City, Nev.....	2,406	2,100	17.4
Windsor, Mo.....	2,241	1,502	49.2
Totals.....	139,465	80,501	73.2

Seventy-nine counties are compared,
as follows:

Counties.	1910.	1900.	P. Ct.
Fifty-four Texas.....	844,456	559,497	50.9
Six Illinois.....	492,843	407,164	21.
Ten Arkansas.....	167,100	129,345	29.2
Two Tennessee.....	95,596	68,321	39.9
Four Nebraska.....	58,095	53,769	7.8
Chautauqua, N. Y.....	165,126	88,314	19.
Madison, Ind.....	65,224	70,470	-7.4
Pueblo, Col.....	52,223	34,448	51.6
Totals.....	1,889,573	1,411,328	33.2

Nothing in any of these groups of fig-
ures seems to indicate the rate of in-
crease in the population of the whole
country. It is believed that Rhode
Island's percentage, 26.6, is nearer the
rate for the whole country than is the
percentage of any of the groups, not-
withstanding the fact that 41 per cent.
of the population of that State is in the
city of Providence. But it is believed
that the rate of increase in the country
will be less rather than greater than
Rhode Island's rate.

Eliminating duplications aggregating
630,748 in the several totals, the total
for the country already announced is
10,973,306, an increase of 3,152,679, or
at the rate of 40.3 per cent. over 1900.
The increase for the two States is 975-
678, or 80 per cent. The total for the
88 incorporated places is 7,528,856, an
increase of 1,962,754, or 35.3 per cent.,
and of the 79 counties is 1,889,573, an
increase of 469,245, or 33.2 per cent.
The total for the 21 cities of more than
100,000 population is 5,532,931, an in-
crease of 1,287,959, or 30.3 per cent.; of
17 cities having between 50,000 and
100,000 population, 1,245,530, an in-
crease of 400,080, or 47.3 per cent.; of
cities having between 10,000 and 50,000
population, 610,870, an increase of 215-
751, or 54.6 per cent., and of cities hav-
ing less than 10,000 population, 138,465,
an increase of 58,964, or 73.2 per cent.

The rate of increase for the whole
country between 1890 and 1900 was 20.7
per cent. That was below the rate of
any preceding decade, the rate between
1880 and 1890 having been 24.9 per
cent., and as high a rate as 36.4 per
cent. having been reached between 1800
and 1810. The past decade has been
notable for the movement of foreign
immigration to this country. That
movement may possibly have tended to
raise the general rate of increase in
spite of the setback given by the finan-
cial disturbances of 1903-1904 and 1907-
1908, a deterrent of such increase in
population and even of the normal in-
crease.

The increase of 100 per cent. for
Oklahoma, while far above the average,
is not unexpected in knowledge of the
avidity with which active and alert
men from all over the country have
seized upon the varied opportunities of
the forty-sixth State, and the notable
increases of 1208 per cent. for Tulsa,
539.6 per cent. for Oklahoma City, 300.7
per cent. for Enid, and 214 per cent. for
McAlester are natural accompaniments
of the general development of the State.
It is interesting, though, to note that
Oklahoma City's increase of more than
54,000 in ten years was greater than the
increase of any other city of the 17

cited having between 50,000 and 100-
000 population.

On the other hand, the increase for
Rhode Island is about the increase of
the average industrial center branching
out upon no new lines of industry. The
difference as to industrial centers ap-
pears in the increase at Schenectady,
N. Y., from 31,682 to 72,826, or by 129.9
per cent., traceable to such industries
as the General Electric Co. and the
American Locomotive Co.; in the in-
crease at Detroit, Mich., from 285,704
to 465,766, or at the rate of 63 per cent.,
due to the great expansion there of the
automobile industry, and in the in-
creases of 72.3 per cent. at Atlanta, 59.9
per cent. at Waterbury, Conn.; 69.7 per
cent. at Bayonne, N. J.; 76.6 per cent.
at Houston, Tex.; 44.5 per cent. in
Hamilton county, Tennessee, which in-
cludes Chattanooga, and 57.6 per cent.
at Pueblo City, Col. The increase at
Jackson, Miss., from 7816 to 21,262, or
at the rate of 172 per cent., is probably
due to the direct connection between
divers activities in that city and the
productive regions of Southern Missis-
sippi given by the completion in 1900 of
the Gulf & Ship Island Railroad. The
advance from 559,497 to 844,456, or at
the rate of 50.9 per cent., in the 54
counties of Texas is an index to the
rate of increase for the whole State,
which, however, will probably appear
to be nearer 40 per cent. than 50 per
cent.

Atlanta, Ga., increasing from 89,872
to 154,839; Houston, Texas, from 44,633
to 78,800; Lynchburg, Va., from 18,891
to 29,494; Jackson, Miss., from 7816 to
21,262; Temple, Texas, from 7065 to
10,993; Brownsville, Texas, from 6305
to 10,517; Abilene, Texas, from 3411 to
9204; Corpus Christi, Texas, from 4703
to 8299; New Decatur, Ala., from 4437
to 6118; Fitzgerald, Ga., from 1817 to
5795; Opelousas, La., from 2951 to
4623; Decatur, Ala., from 3114 to 4288;
Kentwood, La., from 1313 to 3609;
Hawkinsville, Ga., from 2103 to 3429;
Buena Vista, Va., from 2388 to 3245,
and San Angelo, Texas, appearing for
the first time separately in the census
and with a population of 10,321, are
fair reflections of the advance in agri-
cultural, manufacturing and commer-
cial interests of the South in the past
ten years.

AMERICAN IRON AND STEEL INSTITUTE AND THE SOUTH.

The American Iron and Steel Insti-
tute, representing practically the entire
iron and steel industry of the country,
will hold its first formal meeting in
New York in October. To this meeting,
which will doubtless be attended by
nearly every great ironmaster in Amer-
ica, will be invited many of the leading
metallurgists of Europe. The meeting
will be held on October 14, to be fol-
lowed by a banquet that evening, and
on the following day a trip around New
York harbor to study the important in-
dustrial plants located there. In order
to afford the foreign visitors as well as
the members of the Institute an oppor-

tunity to inspect some of the leading iron and steel plants of the country, it is also proposed to follow the stated meeting by an excursion, stopping at Buffalo, Chicago, Pittsburg and Washington, which will be arranged to take place between October 17 and the 23d. It is anticipated that the number desiring to go on the excursion will be sufficient to justify a special train.

In the official announcement of the meeting and the excursion it is said:

A large number of distinguished foreigners have been invited to attend the meeting as guests of the Institute, and it is desired to have a full attendance both at the meetings and on the excursion, in order to extend proper courtesies to our guests.

In view of the very great importance of this meeting as marking the formal beginning of the work of the American Iron and Steel Institute, which is expected to be to this country what the British Iron and Steel Institute has been to Europe, the MANUFACTURERS RECORD believes that it would be a very great mistake to omit the South from this proposed excursion. As now planned, it includes Buffalo, Chicago, Pittsburg and Washington, leaving the South out entirely. Immediately upon receipt of this announcement the Editor of the MANUFACTURERS RECORD wrote to every officer and director of the American Iron and Steel Institute, suggesting that the South should be included in the excursion and stating the reasons therefor as follows:

I am in receipt of Circular No. 1 of Mr. W. J. Filbert, secretary of the American Iron and Steel Institute, in regard to the October meeting. I note that it is proposed to make a trip for the benefit of the members of the Institute, as well as of foreign guests, to Buffalo, Chicago, Pittsburg and Washington. In behalf of the South may I not press upon you and the other officers and directors of the Institute the desirability of including Birmingham? The reasons for this are very many.

There is no other iron and steel district in the country exactly similar to that at Birmingham. It is in the center of a rapidly-developing region, and is typical of the remarkable industrial development now taking place in the South. I do not believe that any other region to be visited on this excursion would be quite as interesting to the members of the Institute, as well as to the foreign visitors, as the Birmingham district, taking in, if possible, the wonderfully rich mineral territory through West Virginia, Southwest Virginia, Eastern Kentucky and East Tennessee.

The industrial conditions in the Central South as represented at Birmingham, the wonderful development now going on in this section, its natural resources in coal, iron, oil, gas and other things, all of which are interesting to every business man, and especially to those in any way connected with that broadest industry, the iron and steel business, would make a trip to the South of very great value to the visitors, of value to the South, and thus of value to the entire country.

I am taking the liberty of sending a letter similar to this to the officers and directors of the American Iron and Steel Institute, and will greatly appreciate it if you will kindly give me your individual views as to the desirability of such a trip.

In reply to this we are in receipt of a number of letters, all of which seem to indicate a favorable sentiment in regard to visiting the South, though some express fear that the limited time may make this difficult. Mr. Edward Bailey, one of the directors, writing from Harrisburg, Pa., says:

Speaking for myself, personally, I know that an extension of the trip to Birmingham would be most interesting. The only possible objection that I might see is the length of time it might take. I shall be very glad indeed to follow up your suggestion when the matter comes before the Board.

Mr. W. J. Filbert, secretary of the Institute, writes:

I am in receipt of your letter of the 18th inst. I appreciate the great force of the suggestions contained in your letter. I have

no doubt but what the same will appeal strongly to the directors of the Institute and to the committee on arrangements. However, as you can understand, the proposed excursion cannot be extended too largely, and if a trip were to be made to Birmingham in addition to the other places indicated, I am just a little fearful lest it would be too much of a charge against the time of the participants. However, it may not appeal similarly to the other members of the board, or it might be advisable to cut out the trip to Chicago. I am sure your suggestion will receive the serious and careful consideration of the board of directors and those in charge of the forthcoming meeting.

The chairman of one of the largest iron and steel companies in the country, who does not desire his name published, writes us as follows:

The greatest obstacle to the adoption of your suggestion to include Birmingham in the itinerary of the trip proposed by the Iron and Steel Institute, as the writer sees it, would be for lack of time. It was thought that the foreign visitors would be more interested in looking over the development at Gary, Pittsburg and Buffalo, particularly inasmuch as these points could be touched on the way to Chicago without any great loss of time. I doubt very much whether it could now be arranged to make the Birmingham trip, although your suggestion is entitled to consideration, and probably will be discussed at the meeting, and the change can then be made if circumstances will permit it.

Willis L. King, vice-president Jones & Laughlin Steel Co., Pittsburg, writes:

I think it is perhaps too early to determine the exact scope of this tour, as it will doubtless depend somewhat on the wishes and the time at the disposal of the Institute's guests. I hardly think the exact itinerary will be decided on until Judge Gary's return, which I believe will be about the middle of September. I note you have written to the officers and directors of the Institute, so that this matter will be brought before all of them and in good shape to be determined at the meeting to finally decide the tour.

William A. Rogers, president Rogers-Brown Iron Co., Buffalo, N. Y., writes:

A visit to Birmingham would be extremely interesting, and take them into a section of the country sufficiently different from those parts which it is proposed to visit, to give them a much more comprehensive idea of our country. I shall be pleased to carry this in mind at the next meeting of the directors, and, for one, would be glad to see the excursion extended to Birmingham, but whether the additional distance and extra time consumed would make the plan impracticable I am unable to say without a better knowledge of the situation than I now have.

Charles M. Schwab of the Bethlehem Steel Co., South Bethlehem, Pa., writes:

I have your letter of August 18 regarding the possible trip of the American Iron and Steel Institute at its October meeting, all of which will be carefully considered by the committee in charge. I fear, however, that it will be a little greater undertaking with reference to distance than they would probably feel like doing. However, I will present the matter for their careful consideration.

William E. Corey, president United States Steel Corporation, writes:

I shall bear the matter in mind and take up at the next meeting of our board.

Powell Stackhouse, Wallingford, Delaware county, Pennsylvania, writes:

There is no doubt but that a visit to the growing city of Birmingham would be of great interest to the members of the Institute and their guests. Whether the time allotted will permit of this extension to the proposed trip I am unable to say.

Samuel Mather, Cleveland, O., writes:

I should quite agree with you in thinking it desirable to include Birmingham if the officers of the Institute think it practicable.

The MANUFACTURERS RECORD would very strongly press upon every member of the American Iron and Steel Institute the desirability of visiting Birmingham and the South on this trip. Elaboration of the reasons for this are hardly necessary. It is universally recognized that the Central South is to be one of the great iron and steel making regions of the world, and that it is

to hold a very strong position in the foreign trade, and thus vitally affect the interests of iron and steel makers in this and other lands.

Every patriotic American is necessarily interested in seeing the South come into its own. He is necessarily anxious to see a country blessed with such great natural resources utilize them to the fullest extent to its own up-building and to the advancement of the whole land. The iron and steel men of Europe in attendance upon this meeting, having heard much about the South, will be anxious to see it. As interesting as great iron and steel plants may be, they are not so interesting to the metallurgist as a study of the resources which justify their construction at any given point. The opportunity to see what nature has done for the South will, we believe, be of more interest to a majority of the members of the Institute as well as to the foreigners than even a visit to Buffalo and Chicago. We trust, however, that these places as well as the South may be visited. The suggestion of the MANUFACTURERS RECORD is not to cut out these places, but to add Birmingham to the itinerary.

It is needless for us to suggest to the people of Birmingham that through State and city officials, as well as through business organizations, immediate attention should be given to the matter of pressing upon the American Iron and Steel Institute a most urgent invitation to visit the South.

SOUTHERN PORTLAND CEMENT.

The growth of the Portland cement industry in the South is an indication of the rapid expansion in that section of the demand for cement to meet industrial and building activities from Maryland to Texas.

At this time there are six large plants either recently starting up or nearing completion. All of these are located at points from which they can supply local territory and expand out as far as freight rates justify shipment. These include the plant of the Security Cement & Lime Co. at Security, Md., which has been increased from a capacity of 800 barrels per day to 2200 barrels; a portion of the plant is in operation, and it is expected that the full plant will be at work by September 1; the American Cement Co.'s new branch, known as the Norfolk Portland Cement Corporation, which will have its plant of 3000 barrels daily completed at Norfolk by September 1; the Clinchfield Portland Cement Co., which is pushing the construction of its 3000-barrel plant at Kingsport, Tenn.; the Atlantic & Gulf Portland Cement Co., which has recently started a portion of its new plant at Ragland, Ala., and which will have an ultimate capacity of 3000 barrels per day; the Mobile Portland Cement & Coal Co., which is progressing with the construction of its 3000-barrel plant at St. Stevens, Ala., and the Piedmont Portland Cement & Lime Co., Aragon, Ga., which expects to have its 1000-barrel plant completed and in operation within 60 days.

When these plants are in full running order they will have an aggregate capacity of over 15,000 barrels daily, which in itself strongly indicates the rapid growth throughout the South for cement.

In addition to the above plants there are already in the South the following established ones: The Virginia Portland Cement Co. at Fordwick, Va., with a capacity of 3500 barrels a day; Dixie Portland Cement Co., Richard City, Tenn., with a capacity of 6000 barrels a

day; Southern States Portland Cement Co., Rockmart, Ga., with a capacity of 1200 barrels daily; Standard Portland Cement Co., Leeds, Ala., with a capacity of 1200 barrels daily; Alabama Portland Cement Co., Spocari, Ala., with a capacity of 1000 barrels daily; Kosmos Portland Cement Co., Kosmosdale, Ky., with a capacity of 1500 barrels daily; Texas Portland Cement Co., Dallas, Texas, with a capacity of 4000 barrels daily; The Southwestern Portland Cement Co., El Paso, Texas, with a capacity of 1500 barrels daily; Southwestern States Portland Cement Co., Dallas, Texas, with a capacity of 2500 barrels daily; Dewey Portland Cement Co., Dewey, Okla., 2000 barrels daily; Oklahoma Portland Cement Co., Ada, Okla., with a capacity of 2000 barrels daily. These plants have a total capacity of 26,400 barrels daily, which, added to the capacity of the plants in the course of construction, gives those in the South a daily aggregate output of 41,600 barrels daily.

When these plants are all in operation, allowing for the necessary stoppages, they ought to have an output of 10,000,000 barrels a year, which is more than the United States produced as late as 1900.

Eventually the development of the cement industry will probably be so rounded out that it will to a large extent become somewhat local in its scope, owing to the heavy cost of shipment to long distances. At the present time, however, leading cement makers are finding markets at far distant points from their plants, some by reason of the fact that their brands are so well known as to command a ready sale in preference to less widely-known brands, and some by reason of the hustling qualities of their selling department, which enables them to push their trade into distant territories.

NEW YORK SCHEME PUNCTURED

Coincidentally with a demand that immigration authorities should not designate Hebrew immigrants to this country by their historic name attempts were made from New York to induce Texas and nearby States to fall in with the plan of the Jewish Immigrants' Information Society of "distributing" immigrants to other points than New York. At the time the Texas Commercial Secretaries' Association seemed to be inclined to favor the plan. The MANUFACTURERS RECORD warned against it, not because of a failure to recognize the great part that the Jew has played in human history, not for lack of sympathy with the Jew in Russia, but because the class of Russian Jews that have been coming in hordes to this country in the past ten years have not been the class likely to benefit the United States, and because we regard as a menace to the country any immigration plan, like that in which Mr. Schiff is prominent, based upon race, religious faith or political creed. Now at last immigration authorities have turned back 100 Russian Jew immigrants at Galveston, which was the main port involved in the scheme, having reached the conclusion that too easy admission at that port has stimulated particular immigration to it. It begins to look as though the plan of relieving New York of congestion of undesirable population by working Southern States is reaching its limits.

POLITICS IS CHEESEY.

Inspired by the initiative and referendum, United States Senator Owen of Oklahoma is having visions of politics

recalling the experience of an old farmer in the depths of the country. Upon the initiative of his wife, who had caught him young and had him in proper training, he got out of his bed one night under her impression that a storm was approaching and her suggestion that he should close the window. She heard him close something. Upon his return to bed his referendum was as follows:

"It's as dark as pitch and smells like cheese, and I think we're going to have —"

Instead of looking out the window he had peered into the kitchen cupboard. And his wife replied:

"Cheer up. The worst is yet to come."

RAILROADS AND COTTON BILLS OF LADING.

In discussing the loose way in which cotton bills of lading have been handled, a Southern banker said to the MANUFACTURERS RECORD some days ago that an illustration of the methods heretofore prevailing would be found in a freight shipment which he had handled, which, said he, is a sample of many shipments. A cotton buyer of his town purchased a hundred bales of cotton in a neighboring town, which, for illustration, we will call Smithville. At Smithville the railroad was blocked with freight, and there was no possibility of the cotton being moved for at least a week, but the seller of the cotton was anxious to get his money, and the buyer of it was anxious to get the profit on its resale. The railroad issued a bill of lading to the Smithville shipper, though the cotton could not be moved for at least a week. It was intended that the cotton should be shipped from Smithville to the compress in the town where the bank is located, there to be recompressed for export. The Smithville shipper, with his bill of lading, drew against the buyer. The buyer took the bill of lading and went to the compress and got the compress company to issue a certificate of recompressed cotton, though the cotton could not be received by the compress for at least a week, and with this a new bill of lading was secured. With this certificate from the compress of the cotton having been recompressed and shipped, the buyer, now the seller to a foreign market, attached to these papers a draft, which the local bank cashed. This, said the banker, in explaining the situation, referred to the handling of a particular lot of 100 bales, but it is illustrative of the methods which have heretofore prevailed in which everybody handling cotton was accounted honest, and railroads and compress companies and banks did business on their faith in the honesty of the men they were dealing with. Recent events, said he, have completely changed the situation, and now the whole business will have to be handled as though nobody were honest, and every detail will have to be worked out in such a way as to make sure that a bill of lading for cotton actually represents cotton received by the railroad, and for which the railroad is responsible.

While the movement announced elsewhere in today's issue showing the steps that one railroad has taken to protect bills of lading for cotton indicates a very great advance over former methods—and perhaps it may meet the situation—we believe that this is only one step that must ultimately lead to the adoption by all railroads of a system in which they will be as responsible for bills of lading issued by them as is a bank for a certificate of deposit. The

railroads may complain and say that this will hamper business and retard shipments; banks might as well complain that the methods which they adopt to safeguard deposits could be made less careful and clerk hire saved thereby, but as banks are compelled for their own protection to safeguard to the utmost the issuance of certificates of deposit, so railroads sooner or later will be, by their own good judgment, or else forced by law, compelled to protect their bill of lading with as scrupulous care as they protect the issuance of stocks and bonds. The holder of a bill of lading issued by a railroad has just as much right to know that his title to the property represented is beyond question as is the holder of a certificate of stock or a bond. It is, we believe, absolutely certain that railroads must so plan for the future, for, sooner or later, either willingly or through the force of public opinion, resulting in a law which will make it a necessity, they will have to do so. The railroads can win friends for themselves by doing it now.

GEORGIA DOGS.

In Georgia 169,598 dogs have been returned this year for taxation at \$1 a head. That means that the State treasury will receive from this source \$169,598, which an Atlanta newspaper considers a most remunerative source of revenue. Last year Georgia had 225,000 sheep of shearing age. What is the relation between so few sheep, comparatively, in a State where so many sheep could be raised worth \$5 or \$6 apiece at the minimum and so many dogs producing only \$1 each, even granting that the taxed dogs are all the dogs loose in the State? And what of other Southern States in this connection, with good markets wanting?

E. N. Hazzard, cashier, Calcasieu Trust & Savings Bank, Lake Charles, La., writes to the MANUFACTURERS RECORD:

We follow each issue of your magazine with much interest and feel that you are doing a great work for the South, and any one who follows from week to week the progress as noted cannot fail to be enthused with the wonderful development and possibilities of our entire South.

FARMERS AND TELEPHONES.

Indicative of the rapid extension of the telephone throughout farm regions of the whole country is the statement from the Western Electric Co. of New York that within the last 20 months it has sold a quarter of a million of rural telephones. This is said to be an unprecedented figure for rural telephone sales. It illustrates how rapidly the farmers of the country are utilizing the telephone, and emphasizes a paper by Mr. M. S. Allen, the Atlanta representative of the company, which is published on another page of this issue.

The Chamber of Commerce of Marion, S. C., is pushing a project for the reclamation of about 30,000 acres of land by the reconstruction of a dam in the Great Pee Dee River which was destroyed 25 years ago.

Several farm companies of Georgetown, S. C., are circulating an attractive pamphlet calling attention to the splendid opportunities for truck growing and other agricultural undertakings in Georgetown county.

A dispatch from Washington states that Georgia marble has been recommended to the Secretary of the Treasury in construction of the postoffice at New Orleans.

SAVINGS BANKS AND NEW ENGLAND THRIFT.

[Editorial Correspondence Manufacturers Record.]

Boston, Mass., August 22.

The savings bank depositors of New England, made up mainly of the poorer classes or working people, as distinguished from the capitalists, have to their credit enough money to buy at par the capital stock of all the national banks of the United States and still have a balance on hand twice as great as the savings bank deposits of the whole South, Maryland included.

In New England the habit of thrift and economy, long developed through generation after generation, has resulted in an accumulation in savings banks to the extent of over \$1,250,000,000, whereas the aggregate national banking capital of the United States is less than \$1,000,000,000. The vast sums deposited in savings banks in this section, in which Massachusetts and Connecticut lead, do not, however, by any means represent a tendency on the part of the people to deposit all of their savings in this way, for investments in local financial and manufacturing institutions, as well as in railroad and industrial enterprises throughout the country, run far up into the billions, much of it made up by small investors.

New England early learned the value of massing its own capital through savings banks, the deposits in which have proved a very powerful factor in furnishing the capital needed for industrial development. It at the same time learned the value of insurance companies in gathering premiums from hundreds of thousands of insured, both fire and life, and drawing to that section the millions thus accumulated, all of which necessarily adds to the financial strength of the community and increases the financial power of this section. Springfield and Hartford are striking illustrations of the possibilities of well-managed insurance companies, both life and fire, in the development of vast financial resources in what may be called the smaller cities, where large financial operations are not usually looked for. The deposits in the savings banks of this section have been a great help in financing its industrial growth. So vast a sum gives to New England the command of what may be called almost limitless capital for safe and conservative investments and loans. The ramifications of the influence of the savings banks are widespread. They touch every phase of business life. Here is a sum available for investment in gilt-edge securities, for loans on real estate, and for much of the financing which can be safely done with savings bank deposits, greater by 30 per cent. than the aggregate of the capital of all the national banks in the country.

It is a noticeable fact that the foreigners coming into New England either bring with them, or else promptly learn from their surroundings, the value of thrift and savings. Many of these foreigners no sooner land and secure work than they become depositors in savings banks. They do not at first venture their savings into business enterprises or into the purchase of land, but almost from the day their employment begins they become money-savers. Some of the money thus accumulated is sent home to take care of the people there until those who have come to spy out the land find that it is a goodly country and a safe place in which to locate permanently. Then they bring their families from abroad, and, once settled here, they branch out beyond deposits in savings banks and become land buyers. Many of the foreigners who are doing a large part of the industrial work of New England are becoming landowners. Some of them

are buying farms on which Americans had failed to make a living; some are buying what might be called abandoned farms, or what to an American looked like a dreary waste, a hopeless bit of land, and by hard plodding work they are making more than a living. These land-buying foreigners, coming, as many of them do, from the Northern part of Italy, where farming methods are of the best, and where the people are entirely unlike those of Southern Italy, are proving that land on which an American would starve is capable under their system of work and care of supplying many of the fruits and vegetables for the markets of New England, to their own profit as well as to the advancement of the State. Thus the habits of thrift and saving, long credited to New England, are not to be lost to this section by the incoming of foreigners, but, on the contrary, these people are either bringing with them or imbibing New England's spirit, and in some respects surpassing the New Englander himself in the things which have made Yankee thrift known the world over.

When the pitifully small savings bank deposits of the South, aggregating, Maryland not included, only \$85,000,000 for about 28,000,000 people, are contrasted with the \$1,250,000,000 in New England for 6,000,000 people, it is easy to understand why the South has not yet been able to accomplish more in financing its own material upbuilding. Notwithstanding the poverty of the South in years past, there has not been a time for a good many years when that section could not have made a great increase in its savings bank deposits if there had existed throughout the South the spirit of economy and thrift in saving developed in New England by the savings bank system. The savings banks of New England are not so much due to the thrift of the people as the thrift of the people is due to the existence and the influence of savings banks. These institutions, founded in early days by men who recognized the value of accumulating the pennies and the dimes and the dollars of the people, developed everywhere the feeling that everybody must have a savings bank deposit, the lack of which in New England is almost everywhere accepted as an evidence of thriftlessness. No sooner is a child born than a savings bank account is opened to its credit. Every baby born in New England is a potential savings bank depositor. The amount deposited weekly or monthly may be small, but it is the aggregate of these small amounts that makes the sum total. Massachusetts, with 2,000,000 savings bank accounts to a total population of 3,000,000, illustrates the universality of the custom of opening a savings account. Out of every three people—men, women and children, paupers, idiots and drunkards—there is an average of two savings bank deposits to their credit.

In the South, on the contrary, the number of depositors in savings banks is triflingly small. In New England it is the exception to find an individual who has not a deposit; in the South it is the exception to find one who has. It matters not how poor the New England family may be, nor how rich, the glamour of the savings bank appeals to every individual. The result is that what would be wasted elsewhere by reason of the lack of savings banks, frittered away on trifles or unnecessary expenses to the disadvantage of the individual and the community, is here gathered through the savings banks to the very great benefit of the depositors and to the equal benefit of the community.

To this habit of saving must be attributed very much of the wealth of this sec-

tion. It is true that the vast manufacturing interests of New England as a whole have proven enormously profitable. It is true that this section, through its operations in the development of the copper interests of the country, has made many millions; in fact, some hundreds of millions through copper alone. It is true that Boston capital, which has gone out into the West and the Southwest, into Mexico, and to some extent into the South, seeking adventure and profit, has been constantly coming home loaded with the accumulated profits of wise investments. New England, like England and France, draws a great income from its investments outside of its own borders, but New England would never have been able to build its vast manufacturing enterprises nor to engage upon so large a scale in the development of mining operations and in the building of railroads elsewhere if savings banks had not been in existence. In the entire South, Maryland to Texas, the aggregate of individual deposits in national banks is \$660,000,000, just a little more than half as much as is on deposit in the savings banks of this section. If over night the individual deposits in the national banks of the South could be doubled, how great would be the influence for the expansion of every business interest, and yet the aggregate then would be but a fraction more than what today is available in New England savings banks.

There are very many lessons to be learned of New England by the South. We need to study the industrial spirit of this section. We need to see how obstacles are simply made the stepping-stones to higher advancement. We need to study what New England is doing in every line of human advancement in order that we may not be unduly elated with what the South is accomplishing. But there is no other one thing that the South needs to take more to heart, learned through the experience of New England, than the value to the individual and to the community of savings banks, and the spirit of thrift which they beget. In the early days the great business leaders of this section saw what the development of savings banks would mean to the people, and they wisely undertook the organization and the management of such institutions. These banks are not stock companies formed for profit, but, like those of Baltimore, are mutual organizations to the management of which the ablest men in the community, men of the highest business standing, men recognized everywhere for their financial integrity, are willing to devote their time. They undertake this work as a part of the duty of citizenship. That indirectly to them may come some measure of return through identification with great financial institutions is accepted, but primarily these savings banks have been organized and managed on the broad principle of benefiting the community through the encouragement of the thrift of the individual. Baltimore itself is a good illustration of this spirit. Its savings banks, with deposits of over \$80,000,000, or about as much as the rest of the South, are managed by men of the very highest standing in the community, whose names carry weight with the public, men who regard as a sacred trust the management of the institutions to whose care has been committed this money. The leading business men of the South owe it to their communities to take up similar work. Savings banks organized by irresponsible men or by men lacking conservatism would do more harm than good to their community. The failure of any savings bank reacts on the whole community and causes people to hoard their little money or to throw it away rather than risk it in institutions regarded as unsafe because

of the failure of badly-managed banks. It is important, therefore, that the very best men in the South should take up this work. There is not an important town or community in the South in which a very large amount could not be gradually gathered in a savings bank when it is established by the right men, and when the community has come to regard the ownership of a savings bank book as a mark of credit and the lack of it a mark of discredit. It is not so important how large the deposit shall be as it is that the habit of depositing shall be started. It will soon feed upon itself and grow strong and healthy. Until this is brought about throughout the South that section will annually waste many millions that might be saved, and will of necessity have to depend very largely upon outside capital for its financing. Partly by reason of the lack of savings banks in most places and the failure of the leaders in every community where savings banks exist to encourage deposits in them, the South annually puts into wild-cat mining schemes millions of dollars, few of which ever return. It throws away millions in cotton gambling, from the man who gambles in a few bales to the one who gambles by the thousands, due largely to the fact that we have not yet learned in the South the value of saving the pennies methodically and persistently, year in and year out. Instead of saving them we waste them; or, worse than waste, we gamble them away. This one lesson the South ought to learn from the experience of this section. The men in the South who take the lead in this work will be rendering that section a service of inestimable value.

To Reclaim Louisiana Lands.

During the past week reports have been received regarding the development of Louisiana wet lands, in addition to other extensive propositions of this nature announced recently. Detroit and St. Louis capitalists purchased 60,000 acres of marsh lands in Lafourche parish from the Golden Ranch Sugar & Cattle Co., John R. Gheens, president, Gheens, La. It is said that the price was \$600,000, and the purchasers plan to construct a drainage system and levees, install pumping stations on each tract of several thousand acres, etc., to provide for reclaiming these lands. The names of the promoters have not been announced, but their attorneys for the purchase were Messrs. Zengel, Thomas & Sutton of New Orleans.

Northern and Eastern capitalists purchased 118,000 acres of marsh land in Calcasieu, Vermilion and Cameron parishes, and will reclaim the property to develop it for rice and corn cultivation, truck farming, etc. J. L. Donahue, vice-president and manager of the Irrigation Securities Co. of Chicago, is interested, and that company has telegraphed the MANUFACTURERS RECORD that particulars are not ready for announcement.

Eastern Tennessee Power Co.

Last week the MANUFACTURERS RECORD presented a general outline of the plans of the Eastern Tennessee Power Co. for developing water-power on the Ocoee River. A few further facts have since been announced at Chattanooga, and they are as follows: First development to be near Parksville and have an installation for transmitting 22,000 electrical horse-power, with space for 10,000 additional horse-power, a total of 32,000 horse-power, which is expected to be ready for transmission by January 1, 1912; second development to be near Ducktown and transmit 53,000 electrical horse-power, this plant to be constructed after the completion of the first plant, the enterprise being financed by the engineers in charge, J. G. White & Co., 43 Exchange Place, New York; Hodenpyl,

Walbridge & Co., 7 Wall street, New York; E. W. Clark & Co., Philadelphia, owners of the Chattanooga Railway & Light Co., and Drexel & Co., Philadelphia; J. W. Adams of Chattanooga, original promoter of the development; initial investment to be \$2,000,000 and final investment to be \$3,750,000.

IRON-MAKING CAPACITY.

This Country's Furnaces Able to Produce 38,700,000 Tons Annually.

The report of Mr. James M. Swank, general manager of the American Iron and Steel Association, just issued, covering the blast furnace producing capacity of the country, says:

"The annual capacity of the blast furnaces of the United States which were active on November 1, 1907, or which their owners expected would be some day active, as published in our directory in March, 1908, amounted to 34,833,900 gross tons, including some furnaces which we felt sure would never run again. Eliminating these furnaces, we placed the annual capacity of the live furnaces in round numbers at that date at 34,000,000 tons.

"During the period between November 1, 1907, and June 30, 1910, a number of furnaces which were classified as active on the former date have been equipped with additional blowing machinery or have been rebuilt or reconstructed, thus increasing their annual capacity, as we estimate it, at least 925,000 tons. On the other hand, a number of furnaces which were included in the active list on November 1, 1907, have since been idle and are likely to remain idle. We estimate the annual capacity of these idle furnaces at 1,795,000 tons.

"The 16 furnaces which were in course of erection on June 30, 1910, will have a total annual capacity of 2,083,500 tons. One of these furnaces, with an annual capacity of 100,000 tons, was blown in on July 20; one stack, with an annual capacity of 182,500 tons, was blown in on August 16; three stacks, with an annual capacity of 302,000 tons, will be ready in September; one stack, with an annual capacity of 144,000 tons, will be ready in the remaining months of 1910, and ten stacks, with an annual capacity of 1,355,000 tons, will be ready in 1911, some of them very early in that year.

"We summarize the above details as follows:

Furnaces—Gross tons.	Annual capacity.
Completed furnaces on November 1, 1907.....	34,833,900
Abandoned or dismantled since November 1, 1907.....	287,000
Remainder.....	34,546,900
Completed since November 1, 1907....	4,468,000
Total.....	39,014,900
Rebuilt and enlarged since November 1, 1907.....	925,000
Total.....	39,939,900
Furnaces idle since November 1, 1907.....	1,795,000
Approximate live capacity June 30, 1910.....	38,144,900
To be completed in 1910 after June 30.....	728,500
Building furnaces to be completed in 1911.....	1,355,000
Approximate live capacity at end of 1911.....	40,228,400

"Of the 35 furnaces which were completed from November 1, 1907, to June 30, 1910, 22 furnaces, with an approximate annual capacity of 3,415,000 tons, are operated by companies which consume in their own steel plants virtually all the pig-iron made, and 13 furnaces, with a total annual capacity of 1,053,000 tons, are operated by companies which make pig-iron for the general market. Of the 22 furnaces built by companies which make pig-iron for their own consumption, four furnaces, with an annual capacity of 690,000 tons, were built by the Carnegie Steel Co.; eight furnaces, with an annual capacity of 1,200,000 tons, by the Indiana Steel Co.; three furnaces, with an annual

capacity of 450,000 tons, by the Jones & Laughlin Steel Co.; two furnaces, with an annual capacity of 360,000 tons, by the Youngstown Sheet & Tube Co., and five furnaces, with an annual capacity of 715,000 tons, by the Worth Brothers Company, the National Tube Co., the New York State Steel Co. and the Wisconsin Steel Co. In addition, on June 30, 1910, 7 of the 16 furnaces then building were being erected by companies which will use in their own works all the pig-iron made. These furnaces will have an annual capacity of 1,116,500 tons. On July 15 the Minnesota Steel Co., a subsidiary of the United States Steel Corporation, broke ground at Duluth for two furnaces which were classified as projected on June 30. These furnaces will have an annual capacity of 325,000 tons, and their output will be used in the company's building steel plant at Duluth."

Better Iron Market Tone.

[Special Cor. Manufacturers Record.]
Birmingham, Ala., August 23.

A careful canvass of the pig-iron situation the past week revealed considerable optimism on the part of sellers. The price is firmly maintained at \$11.50 per ton at the furnace, and inquiries are brisk compared with the past two weeks or month. The best feature of the market is the presence of inquiries from various parts of the country, and particularly the Eastern territory. Heretofore inquiries have been mostly confined to the Middle West. While no runaway market is looked for in the immediate future, yet both buyers and sellers seem to feel that a substantial improvement is not far off.

The manufacturers of cast-iron pipe report continued improved conditions, with several large orders pending. No advance in prices is noted, which are as follows per net ton f. o. b. cars here: Four-inch, \$23; 6, 8 and 10-inch, \$21; 12-inch and over, average of \$20, with \$1 a ton extra for gaspipe.

In an interview with Mr. James Bowron, the newly-elected head of the Southern Iron & Steel Co., today he referred to the fact that as a consequence of recent satisfactory sales of finished products, such as wire nails, wire fence, barbed wire, etc., the stock on hand had been materially depleted, and instructions had been given to the officials in charge at Alabama City to post notices at the steel plant that three open-hearth furnaces would be put in commission about the 15th of next month. Mr. Bowron also stated that as soon as the open-hearth furnaces should use up the present stock of basic iron the big furnace at Alabama City would be put in blast on basic again, and that raw material is now being assembled looking to that end.

Active in Building.

H. L. Lanier, West Point Iron Works, West Point, Ga., writes to the MANUFACTURERS RECORD:

"We are building at present a large storeroom in Lanett, Ala., for McClelland & Howard for general mercantile purposes; a residence for Mr. W. S. Leatherwood, superintendent city schools; three residences for Mr. Horace Lanier in the same city, and extensive improvements in the boiler-house and warehouses at the West Point Manufacturing Co. at Langdale, Ala. We have on our books a contract for coal shute at Lanett Cotton Mills, which will enable them to store a surplus of about 100 cars of coal. There are other extensive improvements contemplated here among the general building trade and the mills, details of which have not yet been worked out."

The assessed value of property at Galveston, Tex., is \$26,326,384, an increase of nearly \$600,000 over 1909.

Southern Railway's Plan to Certify Export Cotton.

[Written for the Manufacturers Record.]

W. W. Finley, president of the Southern Railway Co., announced last week his company's policy relative to the validation of order notify bills of lading for export cotton. He said:

"The management of the Southern Railway Co. recognizes the great commercial importance of this subject, and will do all that it properly can to promote confidence in the markets of the world in its bills of lading. It is believed that the effective enforcement of certain business precautions will go far to satisfy any doubt which now exists as a result of certain alleged manipulation by shippers of order notify bills of lading for export cotton last season, for which the railways were in no way responsible.

"The system of issuing such bills of lading was the subject of a special conference between the carriers and bankers. As a result of this conference, which was held at White Sulphur Springs, W. Va., on July 10, the Southern Railway Co. will arrange, beginning on September 1 next, to make effective the safeguards surrounding the issue of order notify bills of lading which were then agreed upon.

"Among other things agreed upon tending to improve the system of issuing order notify bills of lading for export cotton, these regulations provide for a bill of lading signature certificate which will be signed and attached, on behalf of the railway company by a validation officer, to each order notify bill of lading for export cotton issued by agents of the company authorized to issue such bills of lading. Each validation certificate will set forth that the agent who has signed the bill of lading is the regularly appointed agent of the company, and, as such, is authorized to sign bills of lading in accordance with the regulations of the company, and that the signature on the attached order notify bill of lading is his signature.

"The certificate will be irremovably attached to the bill of lading covered by it, and, as an additional safeguard, the bill of lading, in addition to its own number, will bear the number of the certificate issued in connection with it. Agents will be instructed not to sign bills of lading until the cotton is in the possession of the railway company.

"Realizing the importance of this matter, the officers in charge are instructed to adopt every precaution to make the regulations effective, especially that prohibiting the issue of these bills of lading before cotton has been received by the carrier. It is believed that the effect of these safeguards will be to prevent any such manipulation of bills of lading as it is alleged was practiced in connection with last year's crop, but, as I have said, for which the railways were in no way responsible."

Upon announcement of this plan the MANUFACTURERS RECORD asked of a number of leading bankers in the South an expression of opinion bearing upon it. Their replies follow:

W. P. G. Harding, president the First National Bank, Birmingham, Ala.:

I acknowledge receipt of your letter of the 18th inst., enclosing announcement of the Southern Railway in regard to their new method of handling bills of lading for cotton. It seems to me that this method is a great step in advance of the old system, and that it ought to meet the situation and enable the South to market its export cotton promptly. As there is a certificate attached to each bill of lading, and as the railroad company has issued instructions to its agents not to sign any bill of lading until the cotton is actually in the company's possession, there would seem

to be no occasion for any further guarantees.

Robert J. Lowry, president Lowry National Bank, Atlanta, Ga.:

The announcement of the Southern Railway in regard to handling cotton bills of lading I had previously read, and it occurred to me this should be satisfactory to all fairminded people. I certainly hope it will be. There are many propositions before the country for handling cotton, and I can't but believe that this valuable crop will be ultimately handled on a basis that will be satisfactory alike to all—seller, buyer and shipper. The world requires our cotton and we require its money, and, this being the case, I can't but feel that a happy businesslike method will be agreed upon by all concerned. I am glad to say that in the past three weeks the growing cotton crop in Georgia has improved very much indeed, and the big shortage expected a month ago will be very much reduced. In fact, we calculate that Georgia will make a very fine crop. Our corn crop is unprecedented, and is probably the largest that Georgia has made in a great many years or ever before. This we are very thankful for. When we remember how much the cotton crop means for the balance of trade for this country we can readily see the importance of having it marketed in a way that will be satisfactory to all. Two years ago some \$430,000,000 were received from Europe, and last year some \$420,000,000, in both cases for the raw material, not taking into consideration the valuable by-products and the manufactured goods. I always find your paper taking a conservative position in everything that pertains to the whole country. To reiterate, I honestly believe that the trouble anticipated about the cotton bills of lading will soon be satisfactorily arranged, so that it will be merely a question of the past.

E. H. Pringle, president Bank of Charleston, Charleston, S. C.:

It seems to us that the announcement of the Southern Railway in regard to the new method of handling bills of lading for cotton will depend for its effect almost entirely upon the importance attached to the new safeguards by foreign bankers. In view of the very small number of frauds that have come to light in proportion to the immense number of transactions, we would think that some simple precaution would be much more businesslike than the addition of enormous expense of surety bonds to the already large expense of marketing the crop. At a very low rate for the surety bonds the fixed expense every year would be very little less than the phenomenal losses last year. As far as we can tell, we are comparatively slightly interested in the railway bill of lading agitation in Charleston, as nearly all the business done here is on port bills of lading.

J. A. Omberg, president the First National Bank, Memphis, Tenn.:

We have yours of the 18th inst., enclosing Southern Railway announcement of their proposed method of handling bills of lading for cotton during the coming season, and asking for my views as to whether this will meet the situation, etc. As the English banks have announced that they will not cash drafts after October 31 without a satisfactory bank guarantee from this side, I do not see how this will settle the question unless the English banks recede from their position or modify it so as to enable bills to be sold without such a guarantee. We understand that a meeting between the representatives of the principal English banks and those in this country is to be had on September 5, at which meet-

ing it is to be hoped that a satisfactory solution of the question will be agreed upon.

Caldwell Hardy, president the Norfolk National Bank, Norfolk, Va.:

It seems to be the impression that the methods adopted by the railroads of certifying bills of lading will be acceptable to foreign purchasers of cotton. The New York as well as other banks have declined to guarantee bills of lading, as was at one time demanded we understand by the foreign bankers, because this is entirely beyond the legitimate province of banking. We understand a committee of the New York bankers has the matter up with foreign bankers, and it is anticipated that a satisfactory conclusion in the matter will be reached. We do not anticipate any difficulty in moving our cotton, and recent reports from the Carolinas and Georgia indicate as good if not a better crop than last year.

\$8,000,000 IN BUILDINGS.

Dallas Structures Under Way or Planned Since January 1.

[Special Cor. Manufacturers Record.]

Chamber of Commerce.

Dallas, Tex., August 18.

The progress of a growing city is probably no better shown than in its buildings and those new structures contemplated. The structures that already stand as monuments to the energy and enterprise of its citizenship and those new buildings that are guaranteed by the confidence of both local and outside capital are as much an index to that city's progress and prosperity as anything can possibly be.

Some idea of the commercial importance of Dallas may be gained when it is known that the great general merchandise firm of Butler Bros. has placed Dallas in the same class commercially with New York, Chicago, Minneapolis and St. Louis at an expenditure of more than \$2,000,000 to care for its immense trade in the Southwest. For five years Butler Bros. have maintained at Dallas a large sample-house. They have given Dallas a fair and impartial trial, and the Texas metropolis has made good, so good, in fact, that they are preparing to care for a trade equal to that enjoyed by their Chicago house. Their building, which is now under course of construction, will cover an entire block, will be eight stories, and have 11 acres of floor space. They expect to have the structure completed and stocked in time for the spring trade of 1911.

A five-story building 100x100 feet is also under course of construction by Sears, Roebuck & Co., who have designated Dallas as the distributing point for the Southwest. Sears, Roebuck & Co. have maintained a branch house here for several years, and have now decided to carry large stocks of goods here.

The second half of the eight-story department store building of Sanger Bros. at Lamar and Elm streets will be ready for occupancy about November 1. The steel work is up, and extra effort will be made to have the lower floors finished before the State Fair in October. This new building is the culmination of 50 years' progress of the house, which started in a two-story concrete building at Weatherford, Tex., in 1858, and, coming to Dallas in 1878, began business in a two-story brick house on Main street, opposite the courthouse.

Two months ago Adolphus Busch of St. Louis offered the City Commissioners of Dallas \$250,000 for the city hall site. He stated that it was his intention to erect thereon a 20-story hotel building. While the City Commissioners considered the price offered to be less than the site was actually worth, they were prevailed upon by citizens of Dallas to accept the offer

and thus secure for the city the much-needed improvement in hotel facilities. The sale was finally consummated one month ago, and the city was immediately asked to vacate, so that work on the new structure could begin at the earliest possible moment. The city offices have been moved to temporary quarters, and the work of razing the home of Dallas officialdom for a quarter of a century has already begun. The time limit for the grand opening of the New Oriental has been set for October 1, 1911. The plans for this hotel structure were drawn by the architect firm of Barnett, Haynes & Barnett of St. Louis.

Before October has rolled around work will have been started on the new home of the Southwestern Life Insurance Co. It will erect a 17-story office building 100x100 feet at the corner of Akard and Main streets at a cost of \$750,000. At about the same time the Southland Life Insurance Co. will begin the construction of its home office building on Commerce street. This will be 12 stories, 50x100 feet.

On Elm street, adjoining the Wilson Building, J. B. Wilson will shortly begin the erection of a 12-story building 50x100 feet. This building will be constructed to accommodate the large increase in business of Titcher-Guettinger Company, who occupy two floors of the Wilson at present.

In addition to the above, there are the Cotton Exchange Building, 12 stories, to cost \$750,000, and an apartment-house, eight stories, to cost \$300,000; the Guy Sumpter Building, 12 stories, to cost \$500,000, and the building to be erected by the Liquid Carbonic Co., to cost \$250,000. These have all been definitely decided upon, and the present year will see them all under course of construction.

Practically all of these new buildings have been decided upon since January 1, 1910, and their aggregate cost will run up to more than \$8,000,000. These enterprises have not come to Dallas as the result of a boom, but is the confidence of capital in the future of the city. The growth of Dallas during recent years perfectly justifies this confidence, and it is the conservative opinion of experts on commercial development that at the end of the next decade Dallas will not have a rival in the entire South.

J. R. BABCOCK,
Secretary.

DEVELOPING COAL LANDS.

Spur Given by Railroad Building in Kentucky.

[Special Cor. Manufacturers Record.]

Barboursville, Ky., August 22.

After a three years' suspension of construction work, the Cumberland Railroad Co. has renewed the extension of its various lines in the Knox county coal fields of Southeastern Kentucky, and by the end of the year a large acreage of undeveloped coal land will be opened.

Contracts have been let by the Cumberland Railroad to the Gibson-Carr Construction Co. of Middlesboro, Ky., for the building of its Tye Fork extension; also the extension of the main line three miles farther into the Brush Creek district. The three-mile extension of the main line will carry it to the first tunnel on the route, which was partly run through the Brush Mountain three years ago, and which presents one of the most difficult jobs on the proposed through line from this point to Jellico, Tenn. It is believed that the extension of the main line to this point where it penetrates the Brush Mountain is the forerunner of activity all along the line, and that the Cumberland Railroad will soon be completed through to Jellico, as originally planned.

Work is now under way on the Tye Fork extension, which leaves the main line

at Warren, Knox county, and extends three or four miles into the Tye Fork district. Several companies holding coal land in this district are beginning operations. The Anchor Coal Co., composed of Knoxville capitalists, holds several hundred acres, and has begun the installation of a large plant. The company will build a large number of cottages. Gibson Bros., Middlesboro, Ky., have leased a tract along the new extension, and will install a mining plant at an early date. The Tye Fork Coal Co. of Harboursville is one of the largest holders in the district now being opened for development forces. This company has leased 1200 acres to the Interstate Coal Co., Johnson City, Tenn. The latter company constitutes one of the largest development forces in Eastern Kentucky. Mines will probably be installed on the leased property at an early date. Contracts call for the completion of the Tye Fork extension by the end of the year, and by that time shipments of coal will probably be begun at the mining plants now being installed.

The Cumberland Railroad at present extends from Artemus, two miles from here on the Louisville & Nashville line, nine miles into the Brush Creek field. Rights of way are held and part of the line graded to Jellico, Tenn., a distance of 27 miles from Artemus. Three years ago construction work on the Jellico extension was stopped, but the entire project will now be pushed through to completion.

Coal mining has assumed large proportions along the completed portion of the line during the past three years. The Interstate Coal Co. has three large mining plants and has close to \$1,000,000 invested in developed and undeveloped lands. Recently the company erected a central electrical plant for the operation of its mines. The Trosper Coal Co., Trosper, Ky., has a large mine in operation near the Interstate plants.

A deal of importance last week was the leasing of 600 acres near Gray, Ky., by Joseph Cottongin of this city. He will operate a mine which was installed several years ago, but which has been idle for some time.

W. S. HUDSON.

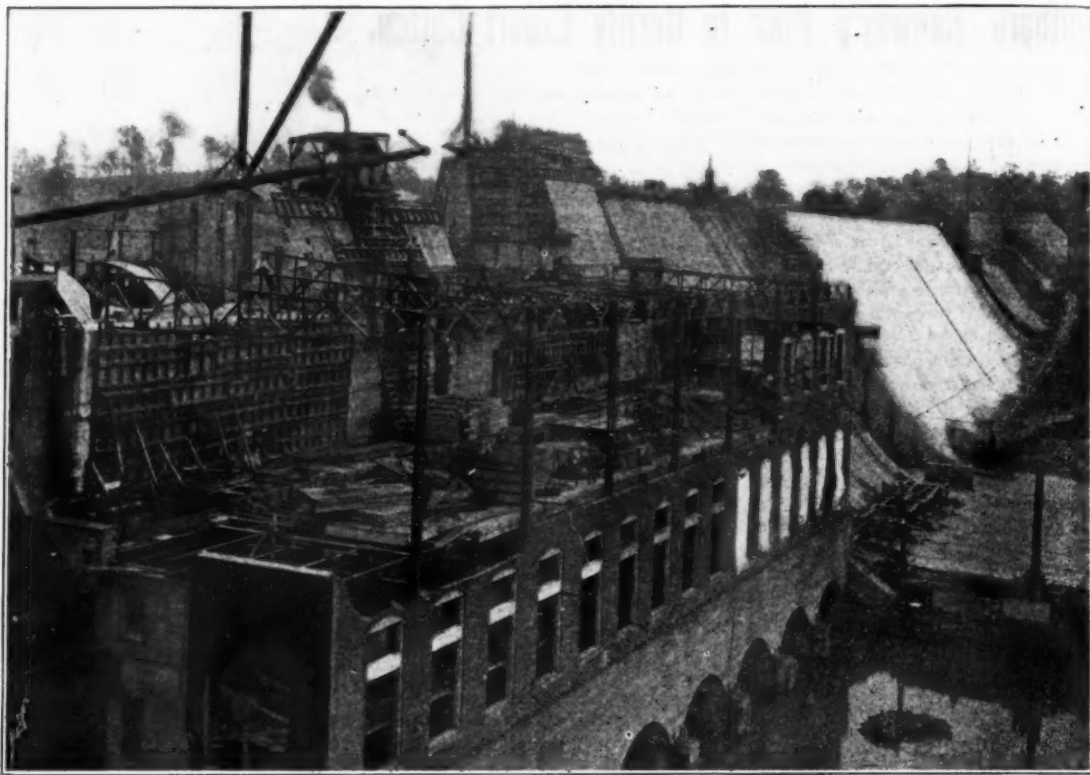
A THOUSAND-MILE FENCE.

Reported Plan for the Mexican-American Boundary.

[Special Cor. Manufacturers Record.]
San Antonio, Tex., August 20.

The largest fence in the world and the queerest artificial boundary established between two countries anywhere will in the near future separate the United States and Mexico. According to a dispatch in the *Mexico Record*, a final agreement to that effect has been drawn up between the two governments, and the fence will be built in the very near future. It will be constructed of stout posts, possibly reinforced concrete, and five-strand, steel-tight barbed wire. In all places where the United States Government owns the land the fence will be set up 20 meters, or about 60 yards, to the north of the true boundary line, and where the ground is owned individually the fence will stand on the exact border. Mounted Mexican rurales will patrol the fence on the South, and the United States rangers will do the same on the north.

The immediate purpose of the fence is to prevent cattle from the two countries from straying onto foreign soil. It will also be useful in the prevention of infectious diseases among cattle, especially the tick. However, the fence will have usefulness in other directions. It will render smuggling and the illicit immigration of Chinese and others into this country more difficult than they are now. About 1000 miles of fence will have to be erected. This is interesting if accurate.



CENTRAL GEORGIA POWER CO. DAM.

This is a view of a recent photograph of the Central Georgia Power Co.'s dam on the Ocmulgee River, Georgia, showing the progress made since the publication of an article covering that development in the *MANUFACTURERS RECORD*, April 21, 1910. This dam is 103 feet high. Its total length is 1710 feet, and the spillway occupies 720 feet of the dam proper. The top of the dam is seven feet wide, and this width is increased by an ogee curve on the down-stream face to a maximum of 93 feet at the bottom. The power-house, shown in the foreground, is two stories high, steel frame fireproof construction, 46½ feet wide, 191½ feet long and 67½ feet high. The primary power to be developed here will be 24,000 horse-power, while the overload capacity of the plant, 6000 horse-power, will be secondary power. The cost of the development is about \$3,000,000. J. G. White & Co., New York, are the supervising engineers, and Lockwood, Greene & Co., Boston, the consulting engineers. The contractor for the dam is Lane Bros. Company, Alta Vista, Va.

BIG NIANGUA POWER ENTERPRISE

Plans for Developing 30,000 Horse-Power at Cost of \$2,500,000.

The *MANUFACTURERS RECORD* recently mentioned the incorporation of the Big Niangua Hydro-Electrical Co., and Roland B. Bruner, 914 Commerce Building, Kansas City, who is interested, sends the following statement outlining the proposition: "Kansas City is one of the best cities in the Union, and what she must have is cheaper power for manufacturing. The street railway company consumes about 15,000 horse-power per day. The factories, elevators and mills about 30,000 horse-power more. This power costs the largest consumers about 2½ cents per kilowatt, and the smaller consumers from 8 to 10 cents per kilowatt, or from \$150 to \$600 per horse-power per year. The Big Niangua Hydro-Electrical Co. is only capitalized at present for \$150,000. They own the land on each side of the Big Niangua River, and have the largest water-power in Missouri. They can play the water over the wheels 176 feet and generate 30,000 horse-power at one cent per kilowatt, or \$60 per horse-power per year, which would make an income of \$1,800,000 gross. It will cost about \$2,500,000 to construct the dam and install the machinery, including the transmission line to Kansas City. It is the object of the company to capitalize for \$5,000,000, issue \$2,500,000 worth of bonds, 10 years at 6 per cent., and lay aside a sinking fund of \$500,000 annually to redeem the bonds. The company has the decree from court, and is all ready now to go ahead."

A State of Opportunities.

Will A. Garner of Oden, Ark., has written to Secretary George R. Brown of the Board of Trade of Little Rock a letter which is a good illustration of the oppor-

tunities for development and investment in Arkansas. He says:

"The farmers of the Ouachita Valley are very anxious to locate a good flouring mill on the Ouachita at some point west of Ouachita postoffice. Will you kindly assist us as much as possible in this matter by giving us the names and addresses of any parties whom you may have. There is a fine water-power site here, where power may be generated with a minimum cost. I think that we might raise a small bonus for the right kind of a plant. There has been a good wheat crop made here this year, and the farmers have no mill, and have to haul their grain some 45 to 50 miles to get it manufactured into flour. There will be a large wheat crop sowed this fall, provided the growers have any assurance of a mill by next harvest. Kindly give me any information that you may have in regard to the matter, and it will be greatly appreciated."

There are, indeed, few States in this country where the farmers today are required to haul their grain 40 and 50 miles to a mill. While the communication will cause some surprise, it is nevertheless unusually interesting, showing, as it does, the opportunities of that rapidly-developing State.

North Carolina Farming.

[Special Cor. Manufacturers Record.]
Raleigh, N. C., August 22.

The Messrs. Wilkinson of Belhaven inform the *MANUFACTURERS RECORD* that several square miles of their swamp land have been put in the first stage of preparation for cultivation. The forest having been felled and the trees and stumps left to be set on fire in the very early spring, the area has been planted in corn, each grain placed in a hole made with a sharp stick, and so luxuriant is the growth that there is no sign of any trees or stumps.

From this strange planting a heavy crop will come.

The cotton compress at Raleigh, installed about 25 years ago, has been removed, as it was useless, the home mills taking all the cotton in this section of the State. The compress has been idle several years on this account.

This year's values of farm properties in North Carolina show a very gratifying increase. It is found that the increase in value of farm lands during the past three years is fully 25 per cent.

W. A. Simpkins of Raleigh has just purchased the 100-acre farm in the suburbs of Wilmington, known as the Chadwick farm, which is all tile-drained and irrigated by means of overhead piping. It has the largest irrigating plant anywhere in this part of the country, and Mr. W. N. Chadwick spent over \$90,000 on the place, having grown lettuce there several seasons. Mr. Simpkins found a popular belief that cotton will not properly mature in that section, and will convert the place into a test farm for cotton and corn, using his own cottonseed and corn from the farm of John F. Batts. Both of these farmers last year smashed records, and are this year trying to make new ones. The farm Mr. Simpkins has purchased will be used as an object-lesson to cotton and corn growers in the coast country from Norfolk to Florida, and will really be on the footing of a test farm, so far as these two crops are concerned; hence its general importance.

FRED. A. OLDS.

It is announced that the committee of the Birmingham Chamber of Commerce in charge of the farm movement campaign has at its disposal more than 200,000 acres of fertile land suitable for truck growing.

Modified plans of the Tallahatchie drainage undertaking in Mississippi contemplate the drainage of 1,137,000 acres of land at a cost of about \$3,570,000.

WHY THE SOUTH NEEDS RURAL TELEPHONES.*

By M. S. ALLEN, Western Electric Co., Atlanta, Ga.

[Written for the Manufacturers Record.]

It is generally recognized that a nation's wealth comes from the productiveness of her fields. Any movement that tends to increase their fertility or to improve conditions in the open country so as to turn the stream of population away from instead of into the cities and congested manufacturing centers should receive constant encouragement.

The one thing which has done most to hamper the South's development has been lack of transportation facilities. The one thing which will most easily, cheaply and effectually overcome this lack is a reliable method of quick communication. This is the part played by the telephone. And after the telephone come good roads and the rural mail carrier.

Each one is an evidence of material prosperity; each one reduces the expenses of a farm; each one serves as a close link between the farmer and the outside world or the next-door neighbor. Only one, though, is on duty day and night, fair weather or foul, and instantly available.

To receive the benefit of the good roads you must hitch up a team; you must wait for the whistle of the R. F. D. man to get your paper or letters; but with the telephone in the house a turn of the crank puts you in touch with points near or far.

Probably the first and most direct appeal of the telephone is to the farmer's wife. She has less opportunities of getting away from home than other members of the family. She sees fewer new faces and receives fewer new ideas, so that anything which will serve to break the monotony of her life is welcomed as a God-send. And the amount of visiting which can be done over a long rural line is truly surprising. All of the neighborhood news spreads along the wire even quicker than the "grapevine telegraph" could tell it, and during bad weather or on cold winter nights the "voice in the box" is a great comfort.

Besides its social side, though, another and even greater appeal the telephone makes is as an aid in emergencies. It is a watchdog that never sleeps, but that is always ready to summon assistance in any crisis. Two cases where a telephone saved a life have come to my attention within a week. One occurred at Eastman, Ga., when Mr. Bond had his left arm completely severed above the elbow in a gin. His wife immediately telephoned for a doctor eight miles away, who arrived 20 minutes later, soon enough to stop the hemorrhage and thus keep him from bleeding to death.

The other case occurred at Hiram, Ga., where a little boy was bitten on the ankle by a rattlesnake. In less than two minutes a doctor seven and a half miles away, had told the parents how to apply a bandage to stop the circulation; in 25 minutes the doctor himself was on the ground, and the boy's life was saved.

In neither case would it have been possible to even notify the doctor in the total time it took the telephone to get him to the spot. Instances of this sort are not rare; they occur every day, and have gone a long way toward demonstrating the value of the telephone on the farm.

But it is in other and more practical ways that the real value of the telephone is shown. You have some cotton or other produce to sell. How many times in the old days did you hold that cotton for what you considered a fair price. After days of waiting you learned that your figure had

been reached. You loaded up the cotton, and the next morning carried it to town, only to learn upon arrival that the market had gone off 20 or 30 points in 24 hours. You had to sacrifice the cotton, store it or take it home again, perhaps to repeat the same operation the following week. With the telephone you get the changes of the market every time you care to call up, and are in just as close touch with it as though you yourself were on the floor.

Or you find you need some machine parts or something with which to repair a tool, and can ill spare a hand or a mule to send to town for it. What is easier than to call up your supplier and arrange to have it sent out by a neighbor. One such experience will save the annual expense of the instrument.

Recent magazines have been full of the co-operative studies, showing how the potato growers of Virginia, the apple growers of Colorado, the celery growers of Florida and the Georgia peach growers have been getting together to properly market their crops and buy their fertilizers. But in order for a group of men thus to get together there must be mutual confidence, a condition only to be attained by close acquaintance. Here again the telephone paves the way, for the rural telephone line is almost invariably a community affair, and the men who get together and build it are talking with one another daily, even if they do not see one another once a week.

Telephone companies generally are mak-

ing strenuous efforts to popularize the telephone in the country, and are making very liberal propositions for connection to their toll lines or exchanges. In localities through which the toll lines run, but where there are no existing exchanges, they will permit farmers' lines to build up to the toll station and there connect direct to the toll line whenever toll connection is desired, the only requirements being that the lines be well constructed, the telephone sets efficient and a toll switching device installed. Each farmer may use the toll line as often as he desires, paying the regular toll charge for each connection. Conversations over the farmers' lines are, of course, free.

At exchanges the usual plan is for the company to meet the farmers at the exchange limits, each owning the line and equipment to that point. The usual rate charged is 50 cents per set per month, with a minimum charge of \$3 per month per line. For this charge the farmer receives service not only with the other people on his line, but also with all the subscribers of the exchange with which his line connects.

The low cost of farmers' telephone lines and the ease with which they may be constructed, together with the liberal offer of telephone companies for connection, places the telephone within reach of every farmer, and every farmer who has one is in a better position to farm his land and market his produce, aside from the other advantages the telephone brings him.

Getting a telephone line started in a section where there are none is usually slow, hard work, because in such a community the value of the telephone is not appreciated,

while there are wholly incorrect ideas of first and final cost and the simplicity of building and maintaining line and instruments. As already stated, anyone who can build a fence can build a properly-constructed telephone line and install his instruments. And any man or boy can quickly learn to clear the ordinary troubles which occur, and which usually consist of a tree falling across the line, grounded carbons or burned-out fuses in the lightning arrester, or the renewal of worn-out batteries. Booklets illustrating and telling simply how to accomplish these things are to be had for the asking, while telephones are so well designed and durably built that any other kind of trouble seldom occurs.

The rural telephone movement has been likened to an epidemic. Once it gets started in a community it spreads like wildfire. Every man wants to be in the same favorable position as every other, and no woman can endure seeing her neighbors able to talk with one another or town without insisting that she, too, get into the game.

Recent statistics show that of the 10,000,000 telephones and 24,000,000 miles of wire in the world, over two-thirds of the telephones and wire mileage is in the United States. Let us try to make the South show the greatest proportional development in the United States.

Texas Company's Great Growth.

A report from Houston, Tex., says that the assets of the Texas Company during the past 12 months increased nearly \$5,000,000, according to the annual statement of that corporation, which is engaged in the oil business. The increase is said to be composed principally of growth of valuation of the property, which includes real estate, plants and equipment, pipe lines, etc., that gained more than \$3,000,000. The amount of crude oil on hand is valued at \$2,000,000 over the stock on hand at this time last year. Cash on hand has increased more than \$1,000,000. The 6 per cent. gold debenture bonds of the company have been reduced in amount from \$6,000,000 to \$30,000. The capital stock is increased in the amount of \$15,000,000, or from \$12,000,000 to \$27,000,000. The total assets show the gratifying sum of \$32,901,866. This is made up of plant account, which covers all refineries, real estate, pipe lines, cars, ships, wells, etc., amounting to \$18,468,735. Stocks of oil amount to over \$6,557,000. The capital and surplus combined amount to \$28,100,000.

Of Interest to Architects.

The Confederate Memorial Association, J. Taylor Ellyson, president, Richmond, Va., has instructed its executive committee to receive competitive plans for the association's proposed building. This structure is to cost about \$150,000, and a firm of architects has been engaged as advisers in preparing and awarding the competition. Prizes of from \$200 to \$1000 are offered. Architects are invited to investigate before September 30 the conditions of the competition.

The textile department of the Agricultural and Mechanical College of North Carolina, West Raleigh, has already 31 graduates occupying responsible positions in the textile industry or allied undertakings in North Carolina, Alabama, Texas, Virginia, New York and Pennsylvania.

The Business League of Houston, Tex., is circulating an attractively illustrated pamphlet presenting definite facts about Houston and its vicinity, its manufacturing, railroads, wholesale and retail trade, agricultural possibilities, banking and educational facilities.



ALDERSON-STEPHENSON OFFICE BUILDING, CHARLESTON, W. VA.

In course of construction; 10 stories, 40x90 feet; fireproof construction; building rests on 32 concrete piers down to solid rock to 64-foot depth through 18 feet of quicksand; cost without mechanical equipment, \$200,000; cost of steam-heating plant, \$20,000; cost of electric-lighting plant, \$5000; cost of electric elevators, \$12,000; owners, C. M. Alderson and Samuel Stephenson, Charleston; architects, Hardin & Upman, Washington, D. C.; contractor, Moore Construction Co. of Charleston.

*A paper read at a joint meeting of the Macon Chamber of Commerce and the Bibb County Fruit Growers' Association.

SOUTHERN COMMERCIAL BODIES WANT INDUSTRIES

WHAT IS YOUR TOWN DOING?

The MANUFACTURERS RECORD will be glad to receive from responsible correspondents in every town in the South brief items of news about business conditions and the opportunities for industrial enterprises. This information is desired for publication without cost of any kind to the sender, and regardless of whether the writer of the letter is a subscriber or not. The MANUFACTURERS RECORD accepts no paid town write-ups. It seeks information of this kind from commercial and industrial organizations and from municipal authorities in every town and city of the South.

This department is open only to news facts of interest to investors and homeseekers. Communications of 200 or 300 words are likely to be given prompter publicity than more extended ones.

ABILENE AND ITS GROWTH.

25,000 Club,

Abilene, Tex., August 11.

Editor Manufacturers Record:

Abilene, with its suburbs, is a city of 15,000 people, and is 13 miles east of the geographical center of the State. The town was established on March 15, 1881, with a population of 1500. Through the steady, earnest efforts of enterprising citizens it has grown to such a size as to be the pride of that section of the State commonly known as "West Texas."

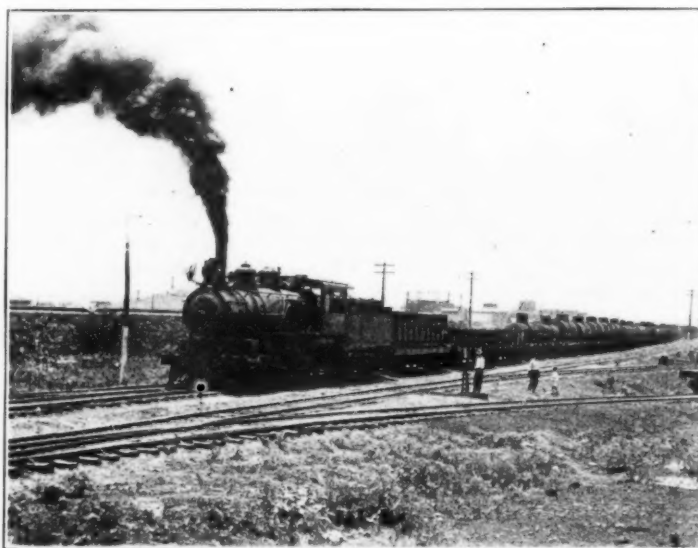
The industries of the city of Abilene have established a city upon a firm and positive basis—three wholesale and produce concerns of a capitalization of more than \$500,000; a wholesale hardware establishment of a capitalization of \$175,000; an ice plant and electric light with a capitalization of \$200,000; a modern-equipped plant for handling baled cotton with a capitalization of \$75,000; a cotton-oil mill and factory for refining cottonseed oil into a cooking oil, with a capitalization of \$150,000; ginning facilities with capitalization of \$50,000, and other industries of varied kinds—broom factory, mattress factory, can factory, machine and implement specialty, a manufactory for products from crude oil, two planing mills, five lumber companies, wholesale and retail. With all these there is assured one of the largest cracker and candy factories for Abilene west of the city of Dallas. Still other large manufacturing and industrial concerns are billed for this place.

Abilene stands as the natural center for distribution of both industrial products and farming products, situated, as it is, on the main line of the Texas & Pacific Railway, 169 miles west of Fort Worth and on the main connecting branches of the Burlington system, giving direct connection to Oklahoma and Kansas City, and with an outlet via the Abilene Southern to the Gulf by connecting with the transcontinental line of the Santa Fe. A further connection is guaranteed by a recently-signed contract for the extension of the Abilene Southern to the northwest, with an ultimate connection at some point in New Mexico.

The Federal Government has seen fit to establish at this point two Federal buildings, a courthouse costing \$100,000 and the weather bureau building, costing \$20,000. Other public buildings include a public library costing \$20,000 and public school buildings and churches approximating \$350,000. The West Texas Baptist Association has established at this place Simmons College, with an enrollment of 400 students and a plant valued at \$250,000, besides an endowment in excess of \$100,000. The Christian Church has located here a Christian Collegiate Institute with an enrollment of 150 students and a plant valued at approximately \$100,000.

A street railway of six miles in length has been in operation on a paying basis for several years. The city water supply consists of a lake covering 288 acres, which, when filled, furnishes a supply to the entire town for all purposes for a time of more than 12 months, and of a very extensive and adequate system of water

mains for distribution of the water supply. The city is well provided with sewerage system and drainage system, and is expending in excess of \$150,000 for street paving. The taxable valuation of the city is \$5,000,000, with a rate of \$1 on each \$100. There are now under construction \$300,000 of buildings, which include business houses, residences and churches. The natural surroundings have favored Abilene in its growth into a city. The large area of tillable lands which completely surround it for many miles have guaran-



TWENTY CARS OF COTTON OIL FROM TEXAS.

This is a picture of a special train of 20 cars of cotton oil shipped as a single consignment by the Continental Cotton & Oil Co. of Abilene, Tex., to a firm in Louisville, Ky. The cars traveled as a special train from the point of consignment to its destination. Mr. B. E. Looney, secretary of the Abilene Twenty-five Thousand Club, sent the photograph to the MANUFACTURERS RECORD. If every other secretary of business bodies in the South should send a photograph of some striking incident as this in the business life of their respective communities, they would accomplish definite results of advantage.

teed a continuously increasing trade. This farm land has proven very productive, and has attracted a class of farmers that has no superior in Texas. It is still an inviting field for a larger number who are fast settling the once famous cattle ranches. Located within easy access to three or four extensive watersheds that pour their flow almost into the town, the populace of this city is assured of an abundant supply for both domestic and industrial use at a nominal cost. This assurance has made it easy not only to please the present population, but to attract foreign capital constantly to this locality.

B. E. LOONEY,
Secretary.

NEAR A TIMBER BELT.

Berea, Ky., August 20.

Editor Manufacturers Record:

Berea is a thriving town of 2700 people, including students. It is situated in Madison county, Kentucky, on the main line of the Louisville & Nashville Railroad, between Cincinnati and Atlanta, in the foothills of the Blue Ridge Mountains.

Situated on a beautiful range of low hills, with the mountains at its back,

Berea has a magnificent outlook over the famous Bluegrass region.

The climate is a happy blending of the cold of the North and the warmth of the South, and is invigorating the year around.

The water system, which is owned by Berea College, brings water pure and sparkling from a reservoir five miles back in the hills.

Berea College, situated in the heart of the town, has more than \$2,000,000 invested in buildings and equipment, and is growing rapidly. Thirteen hundred and thirty-five students were enrolled last winter. The faculty of the college numbers 75 persons. The social atmosphere of Berea is highly moral and wholesome. There are five churches in the town of various denominations, and services are held regularly.

During the past year Berea has built five miles of cement sidewalks. This will be more than duplicated this year.

Berea is 1070 feet above sea level, so

high that chills and malaria and similar complaints are unknown.

With a great timber belt adjacent, Berea offers a splendid opening for furniture and woodworking factories of all descriptions, tanneries, etc.

We invite correspondence with interested parties. W. H. PORTER.

IN ALABAMA'S GAS FIELD.

Fayette, Ala., August 19.

Editor Manufacturers Record:

It appears gas abounds in this community in abundance. We desire to co-operate with prospective industries, and will assist in securing locations, and expect to offer inducements in the way of cheap fuel. There are fine opportunities here for cotton factories, glass works, woodworking establishments and brick and pottery plants. So far oil has not been discovered. But active work is being pushed with a view to finding it.

C. B. BEACHBURN.

BUILDING AT QUANAH.

Editor Manufacturers Record:

Quanah, Tex., August 6.

F. D. Hendrix will erect two-story

apartment-house and hotel of concrete blocks to cost about \$10,000.

L. E. Walker, president Quanah, Seymour & Dublin Railway Co., made announcement today that work would begin on the Rockport end of line in the next 60 days. No statement was made as to when work would begin at this end.

Tip Jones, chairman building committee First Baptist Church of Quanah, announces that contract for a \$25,000 new church edifice would be let shortly. Glenn Bros., Hugo, Okla., Quanah and Wichita Falls, Tex., are the architects.

Odd Fellows will erect two-story business house on their lots.

Episcopalians will erect a church edifice.

T. F. West & Co. of Waco, Tex., secured contract for Quanah Compress & Warehouse Co. to cost \$35,000. Webb Press Co. secured machinery contract.

T. F. West, Glenn Bros. and Barney Jones will erect residences.

Garrison (Tex.) parties will erect broom factory in Quanah.

Indianapolis (Ind.) parties will organize a \$100,000 company to be located here and to be called Quanah Trust & Mortgage Co. A building is to be erected for them.

Quanah wants a candy factory. Will be pleased to receive offers. Good inducements offered. P. W. WHALEY.

HOW MEN ARE ATTRACTED.

Boosters' Club,

Texarkana, August 11.

Editor Manufacturers Record:

We find that two insertions of each ad. in your paper secures us enough inquiries to be sifted out that to run them longer than that time consecutively is unnecessary. In this connection will state that we have located several plants here within last few months, and now have negotiations pending through the Board of Trade and Boosters' Club with over a dozen more. We have found that where a business man is seeking a location, if he makes a personal investigation of Texarkana and does not want us to put up all the capital and he only the experience, in eight out of ten cases he locates with us.

RALPH G. MOORE,

Advertising Committee.

Detailed information about towns seeking manufacturing enterprises and offering specific advantages for development and business opportunities can be found under the head of "Classified Opportunities" on pages 72, 73, 74, and under "Cities, Towns and Railroads Inviting Factories" on pages 106, 107, 108 and 109.

WANTS INFORMATION ABOUT THE SOUTH.

From letters of inquiry about the South received by the MANUFACTURERS RECORD the following extracts are made in order that business organizations, railroads and others may get in communication with these people or send them literature about different communities:

Mr. R. O. Robinson, Melrose, N. M., writes to the MANUFACTURERS RECORD that he desires all the information he can obtain about the South, both as a place of residence and for investment; will be glad to receive any literature.

Mr. E. T. Palmer, Coffeyville, Kans., writes for literature or other information preparatory to a trip which several of the leading business men of his city will make to Florida in September for the purpose of investigating that State as a place for investment in land.

The National Slavonic Society has purchased 3000 acres of desirable land in St. Mary's county, Maryland, where it proposes to establish an orphan asylum and a home for the aged.

"COMMERCIAL CONGRESS" AS A POLITICAL ROSTRUM.

"KNOWING" THE SOUTH.

[Richmond Times-Dispatch.]

A Southern Commercial Congress is to be held in Atlanta next spring, and Colonel Roosevelt has been invited to attend and make an address. We do not know exactly what the Southern Commercial Congress is, but Charles Hall Davis of Petersburg is its chairman, and it is in reply to his invitation that Mr. Roosevelt has written in the warmest terms of approval "of this admirable movement," declaring that "you and your association have set in motion a force that will have much to do with the complete dissipation of this misunderstanding—the 'former misunderstanding about the South.'" Again, there is to be "no North and no South and no East and no West," except in a geographical sense, and "the South's influence will again be felt, not only in constructive statesmanship, but in the enormous field of constructive business endeavor." "This nation is thrilling with ideals at this very moment (the Colonel's letter was written shortly after the visit to Sagamore Hill of Cecil Lyon, the great Republican leader of Texas), and these ideals relate to constructive work in the future," and from now on—blessed words of cheer and promise and hope—the South "must participate in full in the solution of all the national problems." "All broad-minded men throughout the nation must heartily sympathize with you in what you are doing both to develop and increase the power of the South and at the same time to arouse therein a keener national sense." O, go 'way now! As Agrippa said unto Paul, "Almost thou persuadest me to be a Christian."

Mr. Roosevelt's cordial sympathy "with every purpose of the Southern Commercial Congress in its efforts to make the South know itself" is doubtless said in the best spirit, and his pleasant words will be applauded, naturally, by all our people—we all like to have nice things said about us and our little affairs—but the South has known itself for ever so many years, and has been piking along in its own way for the last 45 years cultivating its fields, clearing its forests, opening its mines, manufacturing its raw materials, educating its children, building its homes, praising its God, the God of the fathers, and piling up its balances in the banks. Last April the Baltimore MANUFACTURERS RECORD printed a statistical photograph of the South, which would seem to show that the South has been doing some very valuable constructive work, as witness the following:

The South yields annually—
 \$2,675,000,000 from its factories.
 \$2,550,000,000 from its farms.
 \$400,000,000 from its forests.
 \$300,000,000 from its mines.
 \$1,000,000,000 of cotton and cottonseed.
 \$700,000,000 of grain.
 \$180,000,000 of live-stock.
 \$175,000,000 of dairy products.
 \$170,000,000 of poultry products.
 \$150,000,000 of fruits and vegetables.
 \$75,000,000 of tobacco.
 \$50,000,000 of sugar products.
 \$650,000,000 of exports.
 20,000,000,000 feet of lumber.
 1,250,000,000 pounds of cotton goods.
 880,000,000 bushels of cereals.
 90,000,000 tons of coal.
 30,000,000 barrels of petroleum.
 8,500,000 tons of coke.
 6,000,000 tons of iron ore.
 3,500,000 tons of pig-iron.
 2,375,000 tons of phosphate rock.
 350,000 tons of sulphur.
 The South's resources include—
 28,000,000 population.

806,947 square miles of land area.
 232,400,000 acres of wooded area.
 16,000 miles navigable inland waterways.

2500 miles of coast line.
 70,000 miles of railroad.
 \$2,110,000,000 invested in manufacturing.

265 separate kinds of industries.
 11,000,000 spindles.
 250,000 looms.
 845 cotton mills.
 830 cottonseed-oil mills.
 125 blast furnaces.
 15,250 lumber mills.
 50 leading minerals.
 490,000,000 tons of coal.
 10,000,000 tons of iron ore.
 5,000,000 horse-power in streams.
 1,000,000 hydro-electric power.
 350,000,000 acres of farm land.
 35,000,000 head of live-stock.
 \$1,400,000,000 of bank deposits.
 \$21,000,000,000 of property.

There is no reason, of course, why we should not build larger barns and welcome more workers into the South, whose fields are white for the harvest; but we have thought that it might not be out of place to say that, whatever may be said about the rediscovery of the Ten Commandments, which the irreverent John Sharp Williams once attributed to Mr. Roosevelt, the South has known itself now for going on nigh 300 years; in fact, long before the Southern commercial Congress educed the very kindly and flattering letter from Mr. Roosevelt, which has warmed the cockles of our heart.

Naturally, "a greater nation will be developed from the development of a greater South." That was Abraham Lincoln's idea when he wanted to know, about the time the "erring sisters" tried to depart in peace, "if we let the South go, where are we to get our revenues," or words to that effect. But isn't it strange that when Mr. Roosevelt was in authority, when the nation fairly trembled at the word of his power, he did so little to enlist the South in "constructive statesmanship?" Read the Blue Books of the Government at Washington when he was the Government, and one will be astonished at how little he depended upon the constructive South then. Practically, the South was shared out of participation in both the domestic and foreign affairs of the nation—read the list. A second-class mission here and there, a measly consular office now and then, a department clerkship occasionally; always "much cry and little wool," then as now.

Mr. Roosevelt touches G in alt, however, when he expresses the earnest hope that "the young men all over America today will keep ever in mind these glorious memories of every section of our common country, and that the men of the North and of the West will remember the South's past with the same pride that the South itself does, for the undying glory won by the men who so valiantly and with such sincerity fought for their convictions, whether they wore the blue or the gray, is now a common heritage of all of us, wherever we dwell."

"Bully!" That has a familiar sound. It reads like a leaf from the past, the unreturning past, thank heaven! when we, too, were moved by such concord of sweet sounds. There, however, in the house of our fathers at Washington, stands the statue of Robert E. Lee, in Confederate uniform, and "his memory," we are assured by Mr. Roosevelt in his letter to Mr. Davis, "is honored no more by the South than it is by the North, and in the North and in the South alike I think we are now learning to apply absolutely in good faith

the great words of Grant: 'Let us have peace.'" Again, we exclaim, "Bully!" But how about it? Last Monday, the day before Mr. Roosevelt gave expression to his noble sentiments, the New York Evening Post printed a long letter from Thomas Sturgis, First Lieutenant and A. D. C., First Division, Ninth A. C., about the Lee statue and Wickersham's "opinion," in which he says that "the halls of Congress and the streets and parks of Washington should be used to perpetuate only the names of those who have served the nation in its broadest sense," and that these places, "especially dedicated to the spirit of nationality, should not be used by any State or party to commemorate those whose lives do not measure up to this standard, and specifically should not be used to commemorate anyone for whom the honor is sought, in any degree, for his efforts to destroy the Union." Sturgis speaks in high terms of Lee, but protests against his statue in Washington, "as a degradation of our national ideals." In conclusion, he says: "The 'incident' is not 'closed.' Like Paul Jones in the 'Bon Homme Richard,' the Union soldiers and the loyal North 'have only just begun to fight.'"

Instead of wasting his time on the South, how would it do for Mr. Roosevelt to direct some of his abounding energy and exuberant patriotism in efforts to "know" the North. There is far greater need in that part of our common country for real "constructive" work than in the South. Mr. Roosevelt hopes that "it can be arranged that the Southern Commercial Congress" be held, "then (on his return from California next March) in one of the cities through which I am able to pass." Why not? Why not hold it in New York, where it will be convenient for him to attend?

PROMISE OR THREATEN?

[New Orleans Picayune.]

Two events occurred yesterday which "promise" or "threaten" (readers can take their choice of the term used) to exert a far-reaching effect on the political condition of this republic.

One of these was the rude and uncompromising setback administered to Theodore Roosevelt by the leaders of the "standpat" or conservative Republican party in New York State, assembled yesterday in executive committee in the metropolis to arrange for the State Republican convention.

The other was a letter from Colonel Roosevelt to the chairman of the Southern Commercial Congress, which is to meet some time soon in Atlanta.

As to the New York incident, some member of the party proposed Mr. Roosevelt as the temporary chairman to open the convention, which is to meet next September, and give tone and temperature to it. But the committee promptly and decisively rejected the colonel, who was there present, and named Vice-President Sherman for the post.

The rejection by the committee in such plain and uncompromising terms of Mr. Roosevelt's active participation in the party's affairs was quite startling, and it is clear that the committee, which represents the standpat element of the party, regarded Mr. Roosevelt as an "insurgent," and when he at once declared himself a progressionist, that set the measure of the difference between the conservative and radical factions of the old party.

Simultaneously with the opening of the chasm between the two elements of the party was the extraordinary Roosevelt bid and greeting to the South. * * * What do all these events and expressions mean when taken with the political conditions that obtain throughout the coun-

try? A blind man can see that with both the great political parties divided into conservative factions on one hand and "insurgents" and progressives on the other, the appearance of a leader of powerful personality and few political scruples may lead a vast body of the people to the result of electing a chief magistrate and gaining control of the Government. Such a movement might go through with a whoop and hurrah without any principles or policy save to win, and after that almost any development might be looked for.

WHOO! AND HURRAH.

[Columbus Enquirer-Sun.]

The New Orleans Picayune says that two events occurred last Tuesday which "promise" or "threaten" (readers may take their choice) to exert a far-reaching effect on the political condition of this republic. One of these events to which the Picayune refers was the rude and uncompromising setback administered to Theodore Roosevelt by the leaders of the "standpat" or conservative Republican party in New York State, assembled in executive committee to arrange for the State convention, and the other was a letter from Mr. Roosevelt to the chairman of the Southern Commercial Congress, which is to meet in Atlanta at some date in the near future.

Readers of the Enquirer-Sun are familiar with the manner in which the New York State executive committee, and they also read with interest his letter to the chairman of the Southern Commercial Congress. The latter, coming as it did, and at the time it did, is really one of the most significant things that has happened in quite a little while. It was, as the Picayune declares, "the extraordinary Roosevelt greeting and bid to the South." But it is the "after" part of the program that should give the people pause. There is a danger threatening from it that is scarcely to be recognized at present; it is there, however; of this there is no sort of doubt. There are discontented Republicans and there are discontented Democrats. These two factions of the two parties may get together at any time, and if they do, there is no telling to what it might lead. They are no less patriotic, perhaps than those who are more conservative, but they are likely to steer the old ship of state against very dangerous breakers if they should be placed at the helm. No political faction that has no more clearly-defined policy than a "whoop and a hurrah to win" can feel the deep interest in the affairs of the Government that one does who pursues a course from political conviction that has come to him after years of thought and study of the affairs of the Government.

Mr. Roosevelt is a man who is possessed of some elements of greatness, perhaps, but he is not a great man in the real sense. He is more of the "whoop-and-hurrah" kind than anything else. And that he is dangerous the people of this country know very well from observing him while he was president. * * * The substitution of executive will for constitutional law is a menace to good government that the people should frown upon; that they should actually put down.

But Mr. Roosevelt is going to make a fight for recognition, either in the regular Republican party or in a new party, perhaps. There is little doubt about this. The Republican State committee of New York has repudiated him, and this is a chance for him to win. If he should win, and he believes he will, then he will look to the South. He has already sent his "greeting" to this section in the letter from which the above extracts are taken. Will the Southern people permit themselves to be deceived by him? Or will they turn him down, even as his own party has

done? Unless the indications are very misleading, it will not be a great while before they will have an opportunity to decide on this question.

CLIMAX OF MODESTY.

[Florida Times-Union.]

Colonel Roosevelt's modesty is only exceeded by his respect for law. A few days ago the Southern Commercial Congress invited him to deliver an address at its session at Atlanta in the spring of 1911. It would not be just to such a modest man to give his answer except in his own words. After writing "My Dear Sir," he proceeds:

"It is not possible as yet for me to answer definitely, but I believe that on my trip to California next March I shall pass through the Southern States, and I hope that it can be arranged that the Southern Commercial Congress then hold its meeting in one of the cities through which I am able to pass. If so, it will be a real pleasure to me to be present and say all that I can in behalf of this admirable movement."

And then he proceeded to talk about the blue and the gray, former misunderstandings, present good-will and such things that are old and pleasant, but are not illustrative of the modesty of the man.

Colonel Roosevelt's modesty is shown in the fact that, while he agrees to deliver an address if the Southern Commercial Congress will go after it—that is, will meet at the place where he is at the time he is there—he gave an idea that the place will be somewhere in the South. This will be much more convenient to that body of Southern business men than if he had required them to meet at Oyster Bay. Oyster Bay has not sufficient hotel accommodations, but the members of this congress could have carried a snack with them. In not requiring them to do this Colonel Roosevelt showed a courtesy that is equal to his patriotism.

Colonel Roosevelt would have been letting the members of the commercial congress down light if he had only required them to meet in Oyster Bay to hear his address. Everybody knows how busy he is, what traveler he is and how he is in the habit of making speeches from the rear platforms of trains. He might have required them to charter a train and chase him. If he had decided to deliver a speech from the rear platform of one train while the members of the Southern Commercial Congress occupied the rear platform, windows and roof of another train backing after it with equal speed he would have proposed something novel and would have lost no time. Or it would have served his purpose as well if he had required them to charter a train and run it to the place where he was going while he addressed them from the cow-catcher of a train following behind.

When we see how much more strenuous Colonel Roosevelt's requirements might have been we realize that, in merely requiring the Southern Commercial Congress to come to him, he showed a modesty as high as the ocean, as deep as the Washington monument, as solid as a spider's web.

COMMERCIAL CONGRESSES.

[Mobile Register.]

Mr. G. Grosvenor Dawe has invited Mr. T. Roosevelt to address the Southern Commercial Congress next March, and Mr. Roosevelt is under the impression that he probably will comply. There will be other speeches, but his will be easily the chief. Mr. Dawe may be congratulated upon getting a headliner for his oratorical aggregation.

Mention of this congress brings up the subject of congresses in general. This is the day of reform of all things settled and ancient—the more settled and the more

ancient, the more attractive to the reformers. Commercial congresses, particularly, seem in need of reform.

Such congresses are irreverently spoken of as talk-fests. The reproach is deserved. Generally considered, they are assembled without well-defined purpose, are conducted by the few on lines concerning which the many are ignorant; they pass resolutions that no one has power to enforce, and then dissolve to the four quarters of the earth, leaving the elected officers to struggle along without the financial means to accomplish anything of value. If, perchance, there is any monetary provision, it barely suffices to pay a salary or two and to meet the expense of sending out the "literature," consisting of long and prosy circulars that nobody reads.

There seems to be need of commercial congresses, but they should be on a better basis. Let there be few delegates, instead of a great number, as is now the practice; their expenses should be paid and their instruction given, namely, to examine into, consult together and report on one matter or more matters directly affecting the commercial welfare of those represented, the report carrying with it recommendations that the appointing bodies will be bound to put into effect.

In this way the insurance men, the railroad freight agents, the fraternal societies, etc., conduct their conferences. In like manner commercial men could get together for their common interest. At present, a conference or a congress is little more than a cheap-rate excursion affair, with public meetings and speech-making, and some junket features as its objective. Undoubtedly, so intelligent a class as the mercantile can do a great deal better for itself than this.

Specifications.

Editor Manufacturers Record:

A specification is defined as a definite, particularized and complete statement—the written document in which engineers and architects describe those portions of proposed work which they cannot clearly show by diagrams. In addition, they are expected to specify the material and quantities required, and, with this, the manner of carrying out the work.

How many specifications drafted by engineers come up to these requirements? Frequently they are not worth the paper they are written upon, being so one-sided that they could not stand in a court of law, and being so unreasonable that even the engineer himself would not think of requiring the "pound of flesh" which might be exacted under the letter of the law.

The specifications should be both definite and exact; then the engineer not only fully understands what he requires, but where, in addition, he expects to enforce its carrying out. Engineers fancy that they are able to shield themselves behind a host of unreasonable clauses should a mistake be made. The client must pay for these unreasonable requirements, and the engineer who inserts them places himself in an unfavorable light before the contractors—the men who do the work and are in a position to judge of the necessity of each and every clause.

The insertion of such a clause as "all works are to be done to the entire satisfaction of the engineer. He is to be the sole judge, and the work or material, both of quality and quantity, and his decision only on all questions of dispute with regard to work or material, or as to the meaning or interpretation of plans and specifications, is to be considered final and binding on all parties," are among the most difficult to understand. Why the engineer who prepares specifications and who is a client's

representative shall be the sole judge or referee or arbitrator in matters of dispute between himself and the contractor it is difficult to understand.

The engineer requires certain work to be done. The contractor, for a price, is willing to do the work. They both are agreed with the drawings and specifications covering the work required. It is unreasonable to expect the contractor to be content with any matters of dispute between himself and the engineer that the engineer should be the only referee. We would be surprised if such a clause would hold in a court of law, and we cannot understand why engineers should persist in inserting such clauses in the specifications. Their only purpose seems to be to make ridiculous the other well-framed and necessary clauses. Such a clause as this places the men who make the drawings, prepare the specifications, the contract and issue the progress estimates the arbitrator in matters of dispute. Is this fair to either engineer or contractor?

It cannot be, since no contractor has any idea of abiding by this stipulation should dispute arise.

But this clause undoubtedly keeps a number of contractors from tendering on work where they are not personally acquainted with the engineer. This reduces the number of tenders considerably, and places the work practically in the hands of the friends of the engineer, which is frequently not good business, either for the client or the engineer.

The wording of specifications and the preparation of drawings and designs for the purpose of securing what is required and the statement of what the contractor is expected to perform should be prepared in such a way as to place all contractors upon the same footing. Nor should they be so stringent as to eliminate competition.

R. S. C.

Atlantic Deeper Waterways.

The program of the third annual convention of the Atlantic Deeper Waterways Association, to be held at Providence, R. I., August 31-September 3, includes addresses by Mayor Fletcher of Providence, Congressman John H. Small of North Carolina, William S. Greene of Massachusetts, J. Hampton Moore of Pennsylvania, Richmond C. Hobson of Alabama, Rear-Admiral C. S. Sperry, U. S. N.; Commander Alfred B. Fry, U. S. N.; Commissioner Herbert K. Smith, U. S. Bureau of Corporations; Mayor John F. Fitzgerald of Boston, Dock Commissioner Calvin Tomkins of New York, President Lloyd E. Chamberlain of the Massachusetts State Board of Trade, Railroad Commissioner Joseph F. Gray of Georgia, Chief O. P. Austin of the United States Bureau of Statistics, Governor A. F. Ansel of South Carolina, Governor Frank B. Weeks of Connecticut, Governor J. Franklin Fort of New Jersey, Chief Willis L. Moore of the United States Weather Bureau, President Edward W. Douglas of the Troy (N. Y.) Chamber of Commerce, Theodore Kolischer, United States Senator-elect N. B. Broward of Florida, Speaker Roswell P. Burchard of the Rhode Island House of Representatives, and others. Congressman J. Hampton Moore of Philadelphia is president of the association, and the vice-presidents are Winfield S. Pendleton, Maine; O. L. Frisbee, New Hampshire; Lloyd E. Chamberlain, Massachusetts; A. J. Pothier, Rhode Island; Edward H. Warner, Connecticut; Arthur Knox, New York; Fred. W. Donnelly, New Jersey; Charles Heber Clark, Pennsylvania; Hiram R. Burton, Delaware; Reuben Foster, Maryland; Harvey M. Dickson, Virginia; J. H. Leroy, North Carolina; R. G. Rhett, South Carolina; Pleasant A. Stovall, Georgia, and George F. Miles, Florida.

Big Sugar Refinery for Texas.

Some weeks ago the MANUFACTURERS RECORD mentioned the incorporation of the Texas Sugar Refining Co., with a capital stock of \$1,600,000, and its plans for a plant at Texas City. We now understand that the buildings will be of steel and reinforced concrete construction. Garland B. Miller of Falfurrias, Tex., is interested, and his company, the Millers Bros. Company, telegraphs the MANUFACTURERS RECORD regarding the refinery as follows: "Location not yet definitely settled; Port Arthur, Beaumont, Houston and Texas City under consideration. Plant will convert foreign and domestic raw sugars into refined, principally for Texas market. Enterprise will have \$1,800,000 capital. Plant will cost \$900,000; daily capacity, 2000 barrels; engineer, Eastwick Engineering Co., Ltd., 82 Beaver street, New York. Enterprise will make possible development of very large raw-sugar industry in Texas and on east coast of Mexico, and will have great importance for Hawaii sugar planters."

Virginia Bridge & Iron Co.

One of the most important Southern enterprises of its kind is the Virginia Bridge & Iron Co. of Roanoke. Last week the company's directors decided to increase capital stock from \$800,000 to \$1,500,000, and the stockholders will meet on September 15 to approve this decision. The new capital is necessary because of extensive improvements and plants completed during the past 18 months, branch works having been established at Memphis and Atlanta. Details of these branches were reported by the MANUFACTURERS RECORD. The Virginia Bridge & Iron Co. has developed to extensive proportions from a small iron-working plant of a few years ago. It began with the erection of bridges, and is now furnishing materials for large office buildings throughout the South, besides having under way contracts for steel-car materials for the Norfolk & Western Railway. It is understood the company is now employing over 2000 men.

Harbor Work in Texas.

Major G. P. Howell, United States Engineer Corps, writing from Galveston, Tex., to the MANUFACTURERS RECORD, says:

"I beg to state that bids for deepening and widening Port Bolivar channel will be opened at this office on September 10, 1910. The work will be done by the United States Government, and the engineer in charge is myself. The approximate cost is \$91,080, and it is proposed to enlarge the present channel to 30 feet deep, 200 feet wide and turning basin 1000 feet square.

"You are also advised that bids for dredging Texas City channel will be opened at this office on September 19, 1910. The amount appropriated for the work is \$100,000. The present channel will be deepened and widened to 27 feet and 150 feet as far as practicable with the funds on hand."

Two States Development.

At a meeting last week at Bristol, Va., of representatives of manufacturing, mining and farming interests the Virginia-Tennessee Industrial and Agricultural Association was organized with Gen. Rufus A. Ayres, Big Stone Gap, Va., president; W. E. Minge, Abingdon, Va.; Henry Roberts, Bristol, Va.; Capt. H. B. Clay, Rotherwood, Tenn., and John Thomas, Creston, N. C., vice-presidents; A. L. Shipley, Jonesboro, Tenn., treasurer; F. M. Runnels, Bristol, Va., secretary, and J. O. Lewis, Johnson City, Tenn., assistant secretary.

HOW A TEXAS HIGHWAY WAS IMPROVED.



BEFORE.



AFTER.

These cuts show a piece of road in Brown county, Texas, before an improvement had been made, compared with the result of intelligent expenditures under a bond issue. Mr. D. F. Johnson, secretary of the Commercial Club of Brownwood, tells the MANUFACTURERS RECORD that this was the worst road in Brown county, but is now one of the best. It is claimed that four times the load may now be hauled over the road by the same team and with less effort than before improvement.

\$1,100,000 for Street Paving.

The city of St. Louis had 586 miles of paved streets up to last January, and since then has constructed about eight miles of streets and 16 miles of alleys. Last week the municipal officials awarded further contracts, which aggregate nearly \$800,000. These contracts provide for paving about 42 miles of streets, and upon their completion the city will have improved 50 miles of streets and 20 miles of alleys since January 1, 1910. This is but one of the instances the MANUFACTURERS RECORD has been mentioning recently in order to emphasize the broad scope and extensive cost of street improvements undertaken by Southern cities and towns.

Writing to the MANUFACTURERS RECORD regarding the paving of Camp street, Mayor S. J. Hay of Dallas, Tex., states: "Camp street is only one of a number of streets that we expect to pave within the next few months. There is about \$600,000 or \$700,000 available for paving purposes. We received bids on vitrified brick, bitulithic, asphalt, creosoted pine blocks, etc."

Big Portland Cement Plant Reported.

Reports state that the Commercial Club of Tulsa, Okla., has arranged for the construction of a big Portland cement plant in that city. L. F. Barnes of Humboldt, Kans., and S. C. Garrett of Kansas City, Mo., are said to have made the agreement to build, their plans involving the investment of \$1,200,000 for the erection of buildings and the installation of machinery with a daily output of 1500 barrels of Portland cement.

Fifteen Miles of Concrete Sidewalks.

The little city of Donaldsonville, La., is showing its interest in street improvements by taking action on the construction of sidewalks. Its town council is now considering this subject, and proposes arranging for 15 miles of concrete sidewalks.

The Atlanta National Currency Association, of which Col. Robert J. Lowry is president, has changed its name to the Georgia National Currency Association, so as to include in its membership national bankers not only of Atlanta, but also of Georgia and adjoining States.

During the first six months of this year building permits representing \$862,501 were issued at Little Rock, and permits for about three and one-half miles of sidewalks were issued.

GOOD ROADS**WEEK'S HIGHWAY RECORD.**

Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Edna, Tex.—Jackson county voted \$100,000 of bonds for road construction and drainage system.

Front Royal, Va.—Warren county contemplates voting on issuing \$30,000 of bonds to construct macadamized road to Rappahannock county on top of Blue Ridge. Rappahannock county has voted a bond issue for constructing a macadamized road to this same ridge.

Moss Point, Miss.—City will issue \$15,000 of street-improvement bonds.

New Albany, Miss.—Union county voted bonds for road construction.

Bonds to Be Voted.

Ballinger, Tex.—Runnels county will vote on issuing \$60,000 bonds for road improvements in Precinct No. 1.

Duncan, Okla.—Stephens county votes November 8 on issuing \$20,000 of road-improvement bonds.

Linden, Ala.—Marengo county votes in November on issuing \$175,000 of road-construction bonds.

San Marcos, Tex.—Hays county Road Precinct No. 1 votes October 18 on issuing \$20,000 of road and bridge bonds.

Sweetwater, Tex.—Sweetwater Road District votes September 24 on issuing \$100,000 of road-improvement bonds.

Contracts Awarded.

Greenville, S. C.—City awarded contract for bitulithic street paving.

Kansas City, Mo.—Jackson county awarded two contracts for three miles of rock roads; cost about \$34,000.

Little Rock, Ark.—West Twenty-third Street Commissioners awarded contract for brick pavement, with concrete base and filler; estimated cost \$40,000.

Selma, Ala.—Dallas county awarded contract for construction of seven miles of road; estimated cost \$17,000.

St. Louis, Mo.—Board of Public Improvements awarded various contracts involving construction of 42 streets; work includes vitrified brick paving, reconstructing with vitrified paving brick, bitulithic paving, reconstructing streets with Southern long leaf yellow pine blocks, etc.; contracts total nearly \$600,000.

Temple, Tex.—City awarded contract

for paving French avenue and North Main street.

Webb City, Mo.—City awarded contract for curb, gutter and cement sidewalks on North Webb street, and for paving alley with brick.

Contracts to Be Awarded.

Annapolis, Md.—City will pave West street with vitrified brick; about 3050 square yards.

Atlanta, Ga.—Paul Norcross and B. M. Hall, engineers, are considering preliminary details for constructing road from Atlanta to Jacksonville, Fla.

Birmingham, Ala.—Jefferson County Board of Revenue received bids until August 30 for road improvements costing \$12,790.

Dallas, Tex.—City receives bids until August 31 for paving Preston street and Swiss avenue.

Donaldsonville, La.—City contemplates laying 15 miles of concrete sidewalks.

Florence, Ala.—City opens bids August 29 for constructing crushed limestone roadway and cement sidewalk, and for crushed limestone roadway and combined cement curb and gutter and cement sidewalks.

Fort Worth, Tex.—City Commission appropriated \$12,000 for paving street intersections on College avenue, now being paved a length of two miles.

Gadsden, Ala.—City opens bids August 29 for 8020 square yards of cement sidewalks and 2820 square yards of cement sidewalks, relaying 1560 square yards of 18-inch hexagonal blocks, 404 square yards of brick walk and 250 square yards of flagstone with cement walk.

Greenville, S. C.—City decided to pave 12,000 yards of side streets with bitulithic and a block on Buncombe street with asphalt.

Greenville, S. C.—W. G. Sirrine and associates are promoting the reconstruction of a road between Greenville and Hendersonville, N. C.

Guthrie, Okla.—City contemplates laying 8000 linear feet of cement sidewalks.

Leesburg, Va.—State Highway Commissioner opens bids August 26 for constructing three to four miles of macadam road.

Lynchburg, Va.—City opens bids August 29 for laying granolithic sidewalks.

Memphis, Tenn.—City Commissioners adopted ordinances for paving various streets.

Montgomery, Ala.—County opens bids August 29 for grading and draining five miles of road.

New Orleans, La.—Board of Commissioners receives bids until September 6 for creosoted wood paving on concrete foundation.

Norfolk, Va.—Berkley Ward Improvement Committee recommended asphalt paving to cost \$14,820 on Berkley avenue, and curbing and guttering on South Main street to cost \$1440.

Norfolk, Va.—City Engineer will prepare plans and specifications for paving Hanover and Main streets under appropriations of \$2076.50 and \$5925.

Palatka, Fla.—Putnam County Bond Trustees open bids September 2 for constructing hard-surfaced road.

Parsons, W. Va.—Tucker county opens bids September 3 for replacing present Slip Hill road; length, one and nine-sixteenths miles.

Portsmouth, Va.—Street Committee will contract for granolithic sidewalks on Leckie street and Webster avenue, in Parkview.

St. Augustine, Fla.—City will construct 12,000 yards of asphalt paving.

Taylor, Tex.—Williamson county will expend \$200,000 to construct 60 miles of gravel road, for which contract was recently announced as awarded.

Thomas, W. Va.—Tucker County Engineer has made plans for proposed two miles of macadam road.

Webb City, Mo.—City will grade North Allen street and pave with asphalt macadam.

Whiteville, N. C.—City receives bids until September 15 for constructing 12,000 square yards of street.

Centered at Abilene.

[Special Cor. Manufacturers Record.]

25,000 Club,

Abilene, Tex., August 16.

A movement has been recently inaugurated by the leading citizens of Precinct No. 1, Taylor county, of which Abilene is the center, looking to the building of some 100 miles of good roads in said precinct. At a meeting of the citizens, composed of some 200 men, quite a good deal of enthusiasm was aroused. A standing committee was appointed to prosecute the movement. Immediate work was begun, and as a result the Commissioners' Court of Taylor county in its regular session of August 12 declared an election to be held on September 17 to determine the issuing of \$150,000 bonds against the said precinct to be used in building good roads. From the sentiment already expressed, the

bond issue is thought to be an assured fact. If so, some 10 or 12 macadamized roads leading in as many different directions for a distance of 8 or 10 miles will be built out of Abilene.

The action of Precinct No. 1 has already begun to have its effect upon the different precincts of Taylor county. Some of them have already begun making preparations by creating sentiment to petition Commissioners' Court at its next quarterly meeting in November to declare an election for the purpose of issuing bonds for various amounts for good roads. It is expected that within the next six or eight months Taylor county will have from 250 to 300 miles of well-macadamized roads.

R. E. LOONEY,
Secretary.

In West Virginia.

R. P. Pearson, county engineer for Tucker county, Parsons, W. Va., writes to the MANUFACTURERS RECORD regarding the new Slip Hill road:

"There is no special sum appropriated further than the usual amounts levied for roads, except that in this especial case I have gotten one-third of the total estimates under the new road law of 1909 from 'State-aid' fund. Bids will be opened on Saturday, September 3 next, for construction only; the county will furnish culverts and tile needed. No lumber or timber will be used. The work will only be for earthwork at this time, but will be so finished as to be in shape for subgrade for macadam later on. I am the engineer in charge, and Mr. E. D. Baker of Charleston, W. Va., is the State engineer. The road will be two miles in length, and is to be in all respects built to conform to the new road laws of the State. I have also two miles of road laid out between the towns of Thomas and Davis, as a substitute for the present one, which is intended to be macadam. All details from the engineering point have been arranged, but the two towns above mentioned have yet to arrange for the finances by bonding; hence I cannot say as yet what will be the actual results, but as it is being handled by the most influential men of both places, I do not think there can be any doubts as to the ultimate results."

One Thousand Strong.

At a meeting of 1000 citizens of Gibson county, Tennessee, at Trenton the Gibson County Good Roads Association was organized with R. Z. Taylor, president; Mack Morris, secretary, and G. W. Wade, treasurer. It is expected that as an outcome of the meeting the county will vote \$500,000 of bonds for highway improvements. At the organizing meeting addresses were made by Congressman Finis J. Garrett, James R. Deason, W. W. Powers, M. V. Richards, land and industrial agent Southern Railway and Mobile & Ohio Railroad, and Charles Taylor of the Mobile & Ohio Railroad, the two latter emphasizing the close relations between railroads and good roads.

The Howard Auto Transportation Co. of Howard county, Maryland, has applied to the Public Service Commission of Maryland for a franchise. It proposes to operate automobiles from Highland to Clarksville, Ellicott City and St. Charles College, and possibly to Cooksville and Dayton, Md.; capital \$5000; headquarters at Highland, Md. The incorporators and directors are Albert Nichols, Samuel A. Nichols, Samuel H. Hopkins and Covington B. Zepp, Sr., all of Howard county, and Stuart M. Bailey of Baltimore city.

It is estimated that more than 325 tons of ice are manufactured daily in Little Rock during the warm weather.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

RAILROAD GROWTH.

Preliminary Statements Display Gains in Gross Earnings and Net During Year.

Preliminary statements have been issued by several railroads operating in the South and Southwest covering their gross and net earnings during the fiscal year ended June 30, 1910, and making comparisons with the reports of the same date of last year. These statements, which are anticipatory of their annual reports that will appear this fall, are almost all of an encouraging if not flattering character, indicating continued prosperity and liberal growth of business. The statements now at hand include the following:

Chesapeake & Ohio Railway—Total operating revenue \$31,237,169, increase \$4,606,451; net operating revenue \$12,300,470, increase \$2,036,590. Taxes are not deducted.

Norfolk & Western Railway—Total operating revenue \$15,063,870, increase \$5,736,768; net operating revenue, \$14,017,110; operating income after payment of taxes \$12,943,869, increase \$2,366,006.

Norfolk & Southern Railroad—Gross earnings \$2,690,479, increase \$273,158; net earnings \$941,925, increase \$188,326; total net, which includes lumber earnings, \$1,176,732, increase \$303,417; surplus, \$651,732, increase \$303,417.

Virginian Railway—Total operating revenue, \$2,050,387; net operating revenue, \$624,171; total net revenue, \$629,331; operating income after payment of taxes, \$484,664; no comparisons, the line being a new one.

Atlantic Coast Line—Total operating revenues \$29,810,267, increase \$3,666,203; net operating revenues \$10,909,980, increase \$1,799,277; operating income after payment of taxes \$9,791,921, increase \$1,709,875.

Seaboard Air Line—Gross earnings \$20,068,771, increase \$2,134,275; operating income \$6,164,292, increase \$1,441,329; total income \$6,291,308, increase \$1,458,056; surplus \$1,735,935, increase \$1,298,909.

Baltimore & Ohio Railroad—Total operating revenues \$87,068,976, increase \$16,025,487; net operating revenues \$27,079,569, increase \$3,587,963; total net revenues \$26,479,872, increase \$3,527,579; operating income after payment of taxes \$24,105,865, increase \$3,215,761.

St. Louis Southwestern Railway—Operating revenues \$10,986,516, increase \$654,627; operating income \$2,458,143, increase \$192,210; total net income \$3,003,264, increase \$259,787.

Missouri, Kansas & Texas Railway—Gross operating revenues \$26,559,346, increase \$1,258,431; net operating revenues \$7,373,297, decrease (owing to increases in operating expenses) \$260,212; operating income after payment of taxes \$6,369,379, decrease \$305,821.

Louisville & Nashville Railroad—Total operating revenues \$72,433,381, increase \$7,007,490; net operating revenues \$17,447,803, increase \$1,619,411; total net revenues \$17,569,935, increase \$1,635,489; operating income after payment of taxes \$15,966,402, increase \$1,530,449.

NEW EQUIPMENT.

Big Engines on the Clinchfield—B. & O. Reported After More Power.

An officer of the Carolina, Clinchfield & Ohio Railway confirms the report that the company has purchased 800 tons of 85-pound open-hearth steel rails from the Tennessee Coal, Iron & Railroad Co. for

extending branches into the coal fields of the southwestern part of Virginia. He also says there have just been received 10 articulated Mallet freight locomotives, each weighing 180 tons exclusive of tender and 270 tons with tender. Their tractive power is 77,000 pounds, and they can haul 6200 tons on a grade of 16 feet per mile. They take this load south from mines at Dante, Va., to the first division terminal at Erwin, helper engines assisting part of the way. Three Pacific type passenger locomotives have also been received. They weigh 125 tons each, or 205 tons including tender.

The Baltimore & Ohio Railroad, it is reported, contemplates purchasing 25 more Mallet locomotives. The company recently awarded contracts for 10 Mallet locomotives.

The Citizens' Light & Transit Co. of Pine Bluff, Ark., according to a report quoting President J. F. Rutherford, will purchase new equipment.

The Texas Short Line, according to a dispatch from Austin, has purchased 30 gondola cars of 80,000 pounds capacity from the Tom Brown Company of Chicago.

The Temple Northwestern Railway of Temple, Tex., it is reported, has purchased one Mogul locomotive from the Tom Brown Company.

The Sugarland Railway Co., according to a dispatch from Austin, Tex., has bought one freight and passenger locomotive from the Baldwin Locomotive Works, Philadelphia.

The Thompson & Tucker Lumber Co. and the Thompson Bros. Lumber Co. have each purchased a logging locomotive from the Baldwin Works, according to a dispatch from Austin, Tex.

The Houston (Tex.) Electric Co. has received 15 new pay-as-you-enter cars from the American Car Co., St. Louis.

The Kansas City, Mexico & Orient Railway is reported in the market for 11 passenger cars.

The Gulf, Colorado & Santa Fe Railway, according to a report, has ordered several gas-electric motor cars.

The Texas & Pacific Railway is reported building 300 flat cars in its shops at Marshall, Tex. It has also let a contract for two steel postal cars.

The Manufacturers' Railway of St. Louis, according to a market report, has placed contracts for two switching locomotives with the Lima (O.) Locomotive and Machine Works.

The New Orleans, Mobile & Chicago Railroad, says a dispatch, has ordered 200 flat cars and 100 box cars from the American Car & Foundry Co.

CENTRAL OF GEORGIA.

Good Growth Displayed by Annual Report—New Shops Soon to Be Ready.

The Central of Georgia Railway Co. has issued its fifteenth annual report, which covers the fiscal year ended June 30, 1910. The income account shows total revenue from transportation \$11,768,425, increase as compared with last year \$866,615; total operating revenues \$12,052,756, increase \$897,573; operating expenses \$8,474,910, increase \$612,874; percentage of operating expenses to total operating revenues 70.32, a decrease of sixteen-hundredths of 1 per cent, as compared with last year; net operating revenue \$3,577,845, increase \$284,699; total net revenue \$3,647,616, increase \$292,922; taxes \$540,619, increase \$52,792; operating income \$3,106,997, increase \$240,130; total income \$3,839,989, increase \$252,466.

Out of this total income there was expended for renewals and betterments \$1,247,678, increase \$570,111. There was also reserved for similar purposes \$70,444, a decrease of \$89,090. After the payment

of interest on the funded debt, equipment trust, short-term notes, redemption of matured bonds and miscellaneous matters, there was left a balance of \$1216 transferred to the profit and loss account.

The total assets of the company shown by the balance sheet are \$36,371,757, an increase of \$1,872,355.

President J. F. Hanson says that the extensive shop improvements at Macon, Ga., will probably be completed about January 1. The work there was continued during the fiscal year and satisfactory progress made, but the company was disappointed in its expectation that the entire plant would be finished before June 30. The amount expended on these new shops during the year was more than \$915,000. The buildings are all to be completed by September 1, after which the machinery will be put in place, and the general manager, T. S. Moise, thinks that the shops should be in operation by December.

The company built in its own shops 32 coal cars, 6 box cars and 1 caboose to replace equipment retired. It now has 312 locomotives, 246 passenger train cars, 10,224 freight train cars and 336 service cars. It operates 1915 miles of line.

The company constructed 164 side-tracks and spurs, including additions to yards, making a total of about 22 miles. Several miles of extension of similar tracks were also built, making a total of about 26 miles during the year. There were put in track 6385 tons of new and heavier steel rail, amounting to 50 miles of line.

PRESIDENT ERB SAYS SO.

Confirmation of Report That Chattanooga Southern Will Build Extension.

President Newman Erb of the Chattanooga Southern Railroad Co., 42 Broadway, New York, confirms the report that the company contemplates an extension to connect with the Rome & Northern Railroad and a further extension from North Rome, Ga., southward to either connect with or cross the Seaboard Air Line in the neighborhood of Rockmart, Ga. He also says that the details of these extensions have not yet been worked out.

The importance of these extensions, as heretofore described, lies in the fact that they will comprise a necessary link in the establishment of a new short line between Atlanta and Chattanooga via the Seaboard Air Line, the Rome & Northern and the Chattanooga Southern Railroad.

For several years the Chattanooga Southern, which runs from Chattanooga, Tenn., to Gadsden, Ala., 90 miles, was in the hands of receivers, but it was recently acquired by Mr. Erb and associates, who propose to make it something more than a local road. Besides the extensions projected, other improvements are to be undertaken.

The Rome & Northern is a new railroad enterprise which is being pushed by R. G. Peters of Manistee, Mich., who is president, and H. H. Shackleton of Rome, Ga., who is general manager. At present 18 miles have been completed northward out of Rome, Ga., to a point named Gore, but an extension of 34 miles from there to Tunnel Hill is to be built. It was originally proposed to continue on into Tennessee, but the proposed connection with the Chattanooga Southern may result in shelving that plan.

MEMPHIS TO LAKEVIEW.

Important Electric Road Nearing Completion—First Link in Extensive Interurban.

The Lakeview Traction Co., according to a report from Memphis, Tenn., has finished laying track on its electric line from Memphis to Lakeview, Miss., something more than 10 miles, and four miles have been

ballasted. The poles have been erected, and the construction of the overhead work will soon begin. The power-house at Lakeview is receiving its machinery, and it is planned to make an addition to the building for an auxiliary power plant to provide current for the concessions at Lakeview and for other consumers along the road. Several of the cars have been received, but, owing to the unexpected delays which have retarded construction, the road may not be put in operation until after September 1. The line is nearly straight, and is heavily constructed. The cars are high speed. The Memphis terminal is near the end of the Memphis Street Railway Co.'s South Memphis road. At this place a wooden passenger station 50x200 feet is to be erected.

The Clarksdale, Covington & Collierville Interurban Railway Co., which controls the Lakeview road, is seeking a franchise for a line in Memphis, or rather an amendment of a franchise to provide for additional routes which are desired. As indicated by its title, the controlling company contemplates building much farther than Lakeview into the State of Mississippi.

GOING TO BIRMINGHAM.

John T. Cochrane Proposes to Connect and Extend His Roads for a Gulf Route.

John T. Cochrane of Mobile, Ala., president of the Tombigbee Valley Railroad and also of the Alabama, Tennessee & Northern Railway, is quoted in a report from Birmingham, Ala., as saying that details are practically completed for building the contemplated extensions, which, when finished, will make a through line from Birmingham to the Gulf of Mexico at Mobile.

The two lines of which Mr. Cochrane is president are practically parts of the same road. The Tombigbee Valley has built northward from Calvert, Ala., through the western part of the State, and the Alabama, Tennessee & Northern has built southward from Reform, Ala., to meet the former. The two ends of track are now about 60 miles apart. From Reform to Birmingham is about 35 miles, so that nearly if not quite 95 miles of new track would have to be built to complete the route. Already an extension of the Tombigbee Valley from Silas, Ala., north for 10 or 12 miles is under consideration, and will probably be built soon. It should be noted that the Southern end of the road at Calvert, Ala., is about 30 miles north of Mobile. Already more than two-thirds of the entire extensions have been surveyed.

Mr. Cochrane was accompanied to Birmingham by several representatives of Eastern capital who are interested in the plans. If the line does not enter Birmingham over its own track arrangements will be made with one of the existing roads for entrance.

NEW KINGWOOD TUNNEL.

Contract Let for Important Work on the Baltimore & Ohio Railroad.

An officer of the Baltimore & Ohio Railroad Co. confirms the report that contract for the new Kingwood tunnel has been let to Bennett & Talbot of Greensburg, Pa.

Kingwood tunnel is located at the summit of the grade between Grafton and Rowlesburg, in Preston county, West Virginia. The present tunnel is single track, 4100 feet in length, and was constructed between the years 1849 and 1852 by forces under the direction of Chief Engineer B. H. Latrobe of the Baltimore & Ohio Railroad.

The new tunnel will be constructed parallel to the old one, and to the south of it about 80 feet, and will be on a lower grade plane than the former.

In conjunction with the construction of

the second tunnel a line revision will be made from the tunnel to a point about three miles east, which will materially benefit operating conditions.

The new tunnel will be double track, with 14 feet track centers, and will be 4250 feet long.

After the completion of this tunnel the old one will be used for a west-bound track only, and since the grade is down hill in a westerly direction it should be free from smoke.

Construction will be under the direction of Mr. A. W. Thompson, chief engineer of the Baltimore & Ohio Railroad.

SAN ANTONIO—BROWNSVILLE.

Vice-President Perkins Quoted as Announcing Extension to Make Through Route.

Dispatches from San Antonio, Tex., quote A. T. Perkins of St. Louis, first vice-president of the St. Louis, Brownsville & Mexico Railway, and also connected with the St. Louis Union Trust Co., as saying that contracts for right of way for an extension of 22 miles from Kingsville to Alice, Tex., have been secured and rails have been purchased for the proposed line between those points, which will connect his road with the San Antonio & Aransas Pass Railway and establish thus a through route from San Antonio to Brownsville via Kingsville.

It is further stated that Mr. Perkins described this plan to the Chamber of Commerce at San Antonio, and he also intimated that the Frisco system would build its long-contemplated extension from Brady, Tex., to San Antonio. The building of its own line eventually from Alice to San Antonio, about 100 miles, is likewise contemplated by the Brownsville road. Until that is done through service will be given by an arrangement with the San Antonio & Aransas Pass Railway. It is expected that the new route will be operating within a year.

Mr. Perkins is also reported as saying that his company has not bought, nor does it intend to buy, either the San Antonio, Rio Grande & Tampico Railway or the Artesian Belt Railroad.

The St. Louis, Brownsville & Mexico Railway is spending this year considerable money for sidings, spurs, heavier rails, reballasting and new equipment. Altogether about \$1,000,000 will be thus disbursed. The new railroad bridge across the Rio Grande, connecting Brownsville and Matamoros, is now completed and open for business, according to a report also quoting Mr. Perkins. During the autumn it is proposed to establish through service between New Orleans and Mexico City, the Frisco and the Brownsville roads operating together.

Will Build Into Kentucky.

A press dispatch from Cincinnati, O., says that President William Cetter of the Cincinnati, Hamilton & Dayton Railroad has announced that the company will build a bridge across the Ohio River at Ironton, O., and will extend its line into the coal regions of Kentucky.

This report is in harmony with the account published last week, to the effect that an extension was contemplated via Ashland, Ky., to the southern boundary line of Pike county, Kentucky, a distance of about 147 miles, and that it would likely reach the Kentucky property of the Consolidation Coal Co.

Natural Gas for Engine Fuel.

[Special Cor. Manufacturers Record.]
San Antonio, Tex., August 22.

Though the Texas, Arkansas & Louisiana Railroad is only seven miles long, it is the pioneer in the use of natural gas as a fuel for locomotives. The one engine of the system, after burning coal and oil,

is now using natural gas to get up steam, and it is claimed that the last is the best of all. There are neither cinders, smoke or smell incident to its combustion, and steam keeps up with regularity. Moreover, a saving of 25 per cent. is effected. To the regular tender, now useless except as a carrier of water, a gas tank is attached. The credit of the innovation belongs to J. S. Connelly of Carthage, Mo. Whether natural gas can be used to advantage by locomotives making long runs has not yet been determined.

Railroad Scholarships.

George F. Wolfe of Youngwood, Pa., and M. Roy Strong of Cleveland, O., have been announced as the successful candidates this year for the Frank Thomson scholarships, which amount to \$600 annually, and which are awarded after competitive examination to sons of employees of the Pennsylvania Railroad system. Geo. F. Wolfe is a son of George B. Wolfe, a locomotive engineer on the Southwest branch of the Pittsburg division. M. Roy Strong is a son of Arthur W. Strong, telegraph operator on the Cleveland & Pittsburg division. The Thomson scholarships, which afford opportunity for technical education, were established by Anne Thomson, Frank Graham Thomson and Clark Thomson, children of the late President Frank Thomson of the Pennsylvania Railroad.

Large Interurban Plan.

The Tennessee Rapid Transit Co. is reported organizing at Nashville, Tenn., to build an electric interurban railway from Nashville south to Lewisburg via Nolensville, College Grove, Eagleville and Chapel Hill, and also north from Nashville to Springfield and Clarksville via Ridge Top, Greenbrier and Cedar Hill, with a branch 12 miles long from Springfield, Tenn., to Adairville, Ky.; total length of lines about 125 miles. The company will spend for construction, equipment, etc., it is estimated, from \$3,500,000 to \$4,000,000. Incorporation articles are to be filed within a few days. A power plant will not be built immediately, but current will be purchased from the Nashville Railway & Light Co. Among those mentioned as actively concerned in the promotion of the enterprise are Robert L. Burch, Richard T. Wilson, Joseph Frank, John M. Gray, Jr., and R. M. Wilson of Nashville, and J. Parkes of Franklin, Tenn.

The Chesapeake & Ohio Railway during the fiscal year ended June 30, 1910, carried 15,082,237 tons of coal, an increase of 2,675,309 tons, and 467,740 tons of coke, an increase of 78,882 tons, comparisons being made with the year ended June 30, 1909.

To Establish Fertilizer Plant.

The Tidewater Fertilizer Co., Box 28, Savannah, Ga., whose main offices will be located at Port Royal, S. C., after September 1, recently increased its capital stock from \$15,000 to \$25,000, and will establish a fertilizer plant of 100 tons daily capacity. It proposes to occupy rented buildings, and will install a 20-horse-power gas engine, together with minor machinery, including elevator, scales, tools, etc. Officers of the company have not been selected as yet.

To Erect Fertilizer Mixing Plant.

Incorporation of the Farmers' Warehouse & Fertilizer Co. of Reynolds, Ga., has been effected for the purpose of establishing a fertilizer mixing plant of 100 tons capacity per day. Officers of the company are W. M. Musselwhite, president; C. L. Pryor, secretary-treasurer, and W. R. Rogers, manager. Prices are desired on mixing machinery.

LUMBER

[A complete record of new mills and build-up operations in the South will be found in the Construction Department.]

To Report on Timber Holdings.

An announcement in this column of last week's issue of the MANUFACTURERS RECORD referred to a report that Marwick, Mitchell & Co., accountants, Wall street, New York, have received a contract from the Houston Oil Co. to make a detailed report on its timber holdings, and that F. E. Dionne & Son of Houston were awarded a contract for the greater portion of the estimating. In connection with this announcement, the MANUFACTURERS RECORD is advised that Marwick, Mitchell & Co. are doing practically all of this work with their own force, and that the minor work which has been sublet is under their immediate supervision and direction.

Marion County Lumber Co.

In connection with the purchase of approximately 40,000 acres of timber lands in Florida, together with a sawmill, by R. L. Dowling & Co. of Live Oak, Fla., recently reported, the MANUFACTURERS RECORD is advised that R. L. Dowling and T. B. Dowling are the principal owners, and that the available timber amounts to about 150,000,000 feet. The purchasers will incorporate the Marion County Lumber Co. of Silver Lake, Fla., T. B. Dowling, manager, to develop the property, and will increase the capacity of the plant from 40,000 to 60,000 feet of lumber per day. All orders have been placed for machinery.

Removes General Offices.

The Industrial Lumber Co., which has heretofore maintained its general offices at Beaumont, Tex., announces that on and after September 17 they will be located at Elizabeth, La. This company's Elizabeth, Calcasieu and Oakdale mills, together with its logging department, are all located within a few miles of Elizabeth, and the removal of its general offices is for the purpose of effecting an improvement in its service.

Want Flooring, Framing, Etc.

Smith & Wilson, Bristol, Tenn., want prices on 50,000 feet of No. 1 common yellow pine flooring, 125,000 feet of yellow pine framing, 100,000 feet of matched No. 2 common yellow pine flooring, and 20,000 yards of plaster boards.

A dispatch from Clinton, La., states that Hogue Bros., operating a sawmill about three miles from Clinton, have closed a contract with the Mississippi River Commission to supply it with more than half a million feet of lumber to be delivered at Vicksburg.

Mine Owners and Operators Meet.

Meetings of the Western Kentucky Coal Operators' Association and the Western Kentucky Mine Owners' Association were held at Louisville last week for the discussion of routine subjects. I. P. Barnard of Louisville, president of the Coal Operators' Association, presided at its meeting, while the Mine Owners' Association was presided over by George Atkinson of Earlington, who is president of that organization.

For Architects and Contractors.

Wilmington capitalists contemplate building a \$200,000 seaside summer resort hotel, and correspondence is desired with architects and contractors who will undertake construction within time limit. Inquiries should be addressed to Kennan & Stacy, 317 Southern Building, Wilmington, N. C.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

Panola Cotton Mills.

The Panola Cotton Mills, Greenwood, S. C. (previously reported incorporated with a capital stock of \$300,000), has organized with F. S. Evans, president and treasurer; George H. Taylor, vice-president, and C. L. Beaudrot, Jr., secretary. This company's building will be of brick and reinforced concrete, and arrangements have been made for their construction by J. L. Masters of Anderson, S. C. From 10,000 to 15,000 spindles and about 300 looms will be installed, driven by electricity from the Greenwood transmission lines of the Southern Power Co. of Charlotte, N. C. The buildings are expected to be completed by December 1, and the machinery to be in position by April 1. Looms to be furnished by the Draper Company of Hopedale, Mass.; carding equipment by the Saco-Pettee Company of Newton Upper Falls, Mass., and the spindles by the Fales & Jenks Machine Co. of Pawtucket, R. I.

The Standard Knitting Mills.

The Standard Knitting Mills of Knoxville has plans for its yarn-mill buildings, to cost about \$50,000. The yarn mill proper will be 75x210 feet, three stories high, brick and timber, and gravel roof, with boiler and engine room, warehouse and dyerom. The Howard & Bullough American Machine Co. of Pawtucket, R. I., will furnish the cotton-mill machinery, and the Wildman Manufacturing Co. of Norristown, Pa., will furnish the knitting machinery. The yarn mill, with power equipment, will cost about \$50,000, and the completed plant (including the knitting mill and site) will cost about \$275,000. Several weeks ago the MANUFACTURERS RECORD stated full details of the Standard company's plans for this enlargement.

P. H. Hanes Yarn Mill.

Active progress is reported on the yarn mill buildings of the P. H. Hanes Knitting Co., Winston-Salem, N. C. The structures will probably be ready for the textile machinery by October 1, and that equipment will then be installed. The main building is one story high, 135x477 feet, of brick, with metal roof; the cotton warehouse has three compartments, 50x100 feet each, separated by fire walls; there are 36 cottages for operatives. These cottages are equipped for water supply and electric lighting. Complete details of the company's new plant were announced several months ago. This new Hanes mill will cost \$250,000, and will have 10,000 spindles to manufacture yarns for the company's large knitting mill.

New England Mill Men.

At the semi-annual meeting at Portsmouth, N. H., September 15-17 of the National Association of Cotton Manufacturers the program will include papers on a new textile, California cotton, cotton mills of Mexico, economical lubrication, economizers and draft, foreign markets for cotton textiles, illuminating engineering, moisture in cotton, natural and artificial draft, nature and causes of waste fiber in cotton mills, part time instruction for the textile industry, producer-gas engines, purification of water for mill purposes, re-

naissance of the waterfall, rewinding of weft yarn, Russian Turkestan and its products, and textile industry in Hungary.

The Calumet Addition.

The Calumet Manufacturing Co., Liberty, S. C., awarded contract to the Gallivan Building Co., Greenville, S. C., for erection of the weaverom addition reported in June. This building will be two stories high, 80x104 feet, of mill construction, and will be equipped with 200 looms driven by steam power. With this installation the Calumet mill will weave fine sheetings and continue to spin yarns with its 8200 ring spindles. J. E. Serrine of Greenville, S. C., is the architect for the addition.

Jewel Mills.

The Jewel Cotton Mills of Thomasville, N. C., has completed its buildings and installed all equipment except textile machinery. This latter is to be installed in November or December, so as to be ready for the new cotton crop. The company was among the new enterprises reported by the MANUFACTURERS RECORD last year. It awarded contract to T. C. Thompson & Bro. of Birmingham for the construction of an 87x380-foot brick and cement building, and will have 5000 spindles for manufacturing yarns.

Fidelity Hosiery Mill.

The Fidelity Hosiery Mills Co. of Newton, N. C., has been chartered with an authorized capital stock of \$125,000, and \$30,000 paid in. It acquires the Newton Hosiery Mills, containing 350 knitting machines, dyeing and finishing equipment, etc. D. M. Ausley of Statesville, N. C., is president; E. Morrison, also of Statesville, is vice-president, and R. P. Freeze of Newton is secretary-treasurer.

The Roberta Manufacturing Co.

The Roberta Manufacturing Co. of Concord, N. C., has organized and purchased the Dowell Manufacturing Co. plant of 4064 ring spindles. John C. Rankin of Lowell, N. C., is president; P. M. Keller of Concord, vice-president, and S. M. Robinson of Lowell, secretary-treasurer. This company has a capital stock of \$100,000, and was reported incorporated last month.

Danville Knitting Mills' Addition.

The Danville (Va.) Knitting Mills will build an addition to cost \$10,000 after plans by McLaughlin, Pettit & Johnson of Lynchburg and Danville. This new building will be one story high, 73 feet 7 inches by 100 feet, of mill construction, with gravel roof. The Danville company operates 223 knitting machines, dyeing and finishing equipment, etc.

Phoenix Manufacturing Co.

The Phoenix Manufacturing Co. of Kings Mountain, N. C., has been incorporated with a capital stock of \$200,000 by J. C. Plonk of Cherokee Falls, S. C., and associates. This company acquires the Lula Manufacturing Co. plant, recently reported purchased by Mr. Plonk. Its mill has 10,000 producing spindles, 4320 twisting spindles, 30 cards, etc., producing yarns.

Sash-Cord Curtailment.

The MANUFACTURERS RECORD is informed that two of the mills of the country making sash cord from cotton have begun curtailment, and that practically all of them have decided to curtail until prices for their output reach a reasonable level, the price now being received being from three to four cents a pound below cost.

The Cuero Cotton Factory.

The Cuero (Texas) Cotton Factory has not as yet completed its plans for the re-

organization mentioned in July. It is quite possible that the company will double its plant, now having 5000 ring spindles, 100 narrow looms, 50 broad looms, etc. The product is brown sheetings, cheese and bag cloth.

The Brown Cotton Mills.

The Brown Cotton Mills of Ragland, Ala., has been organized with a capital stock of \$250,000 by W. T. Brown, J. A. Thomas, S. P. Hagan and R. A. Hemphill. This company was previously mentioned as to be organized for the erection of a 10,000-spindles mill with 500-horsepower steam plant.

The Sherman Company.

The Sherman Cotton Mills, recently reported incorporated, has building with boilers, engines, pulleys, shafting, etc., and contemplates installing textile machinery. The intention is to interest practical cotton mill men. Address the company, care of the Birge-Forbes Company, Sherman, Tex.

Contemplates a Knitting Mill.

B. Baumgartner, Box 717, Sweetwater, Tex., contemplates establishing a knitting mill, and wants addresses of manufacturers of knitting machinery.

Contemplates a Hosiery Mill.

J. W. Belyeu of Alexander City, Ala., contemplates erecting a mill to knit hosiery. His name was erroneously spelled in a recent item.

Wants Elastic Webbing.

John Cummins of Stoyer, Md., wants addresses of manufacturers of and dealers in elastic webbing for suspenders and other articles.

Textile Notes.

The Puritan Cordage Mills of Louisville, Ky., is installing additional machinery in its finishing department. This company was mentioned recently as increasing capital stock from \$75,000 to \$150,000.

F. H. White of Charlotte, N. C., is reported to have submitted a proposition for the organization of a \$225,000 cotton-mill company at Mocksville, N. C.

FOREIGN NEEDS

Machinery and equipment wanted abroad are mentioned in many letters received by the MANUFACTURERS' RECORD, which is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. For the benefit of our subscribers seeking foreign trade we publish the following extracts from recent letters:

Wants Coal Briquette Machinery.

C. C. MacKee Company, No. 4 Queen's road, Central, Hongkong, China, writes the MANUFACTURERS RECORD:

"Can you put us in touch with people who make large compressing machines? We have the opportunity of furnishing machinery for making compressed bricks of coal dust; in other words, patent coal bricks or blocks. The blocks after compression are to weigh about one cattye each, or approximately 12 to 15 pounds. The machinery is to have the capacity of turning out 10 tons of bricks per hour. It is preferred that automatic screening device be included in the estimate, if possible. Also the data to be sent is to include the consumption of fuel per hour necessary to operate the machinery, and whether kerosene or coal motive power is best adapted. We would think that coal would be preferable in a coal plant. In quoting give all weights and measurements, with lowest cash discounts. Catalogues or illus-

trations in our hands will facilitate placement of business; same wanted in quantity."

Traction Plows, Gasoline Engines, Motor Cars.

George Chapart, P. O. Box 273, Durban, Natal, Africa, writes the MANUFACTURERS RECORD:

"I am greatly interested in kerosene agricultural tractors, also suitable plows for same. I shall be greatly obliged if you will place me in communication with manufacturers of such machines."

"I am also very anxious to introduce here some model of small portable engine, air-cooled, gasoline, to be used for pumping water. Such an engine to be built in such a way that it can be attached to any ordinary farm pump and perform the same work as a windmill. Such an engine could be clamped on the pump itself and with a set of pinions could work up and down the rod holding the piston of the pump. There is a large market for such a machine if I can get a suitable model, which must be reliable, very simple, easy to work and economical."

"As I am traveling continuously in Natal, Orange Colony and Transvaal, Cape Colony, I am in a good position to introduce any articles of common use."

"I deal particularly in motor cars, and shall be glad to communicate with manufacturers of same."

Corset Steels, Electrical Equipment, Etc.

Joaquin Herm, Barcelona, Spain, writes the MANUFACTURERS RECORD:

"It has become necessary for us to find some suitable manufacturing concern making steels for corsets like sample sent you by registered mail. We can sell many thousand gross of them in a short time. Kindly recommend us directly to the principal firms in the United States. We also wish to find a leading firm in electroplating, so that we can compete with the large house of Langbein-Pfannhausen-Sellerhausen, Germany. We would especially like to get offers from leading firms for electro-therapeutic apparatus, X-ray equipment, electrolyses outfits, etc."

Iron, Steel, Wire, Hardware, Etc.

P. Cejudo y Nunez, 5 and 7 Imperial street, Madrid, Spain, writes the MANUFACTURERS RECORD:

"I do an extensive business with English, German, Swiss and Belgium firms, and have been acting as agent for them in Spain for many years. Among these firms are Lindner & Co., Ltd., Birmingham, and L. Possehl & Co., Lubeck, Germany. So far I have had no dealings with America, but I would like to act as agent here for factories producing manufactured iron and hardware in order to sell at wholesale to stores of this city and other places in Spain. I also handle wires, sheet metal, copper, steel, aluminum, zinc, iron, tinned iron, lead, etc., and building materials in general."

Wants Novelties for Germany.

Francis S. Kovessy, 556 West 140th street, New York, writes the MANUFACTURERS RECORD:

"Please tell me the names of some manufacturers of novelties which in your opinion would be good sellers in Germany. I am going on the 7th of next month to Hamburg, and would like to have some fine novelties to introduce in Germany."

For Cotton Waste.

R. A. Sodhan, the Import and Export Concern, Ahmedabad, India, writes the MANUFACTURERS RECORD:

"I would like to know the cotton-waste buyers and manufacturers of your country."

MECHANICAL**Concrete Spouting System.**

An accompanying view represents the concrete spouting system, referred to last week, in use on a Chicago contract. This contract is on the Schoenbrun Building at Peoria and Adams streets, in Chicago,



SPOUTING SYSTEM FOR CONCRETE.

where the Falkenau Construction Co. has adopted the spouting system of putting its concrete into forms and floors. The mixer used is the M-C rail track mixer furnished by the Marsh-Capron Manufacturing Co. of No. 460 Old Colony Building, Chicago.

"The Power With the Need."

It frequently happens in the operation of industrial plants, public-service corporations and other important institutions that emergencies arise when it is an absolute necessity that enlargements should be made quickly to meet existing conditions. While the work must be done quickly, quality cannot be sacrificed in obtaining this end. As a result there has come a demand for those peculiarly fitted to meet such emergencies, and organizations have been perfected which make a specialty of undertaking the construction of new plants or the enlargement of old ones in quick order and in a substantial and thorough manner. These organizations maintain a staff of experts thoroughly versed in all lines of engineering and construction, and, being well trained into systematic co-operation, they are splendidly equipped to successfully accomplish what, to the layman's mind, seems an impossibility.

The Stone & Webster Engineering Corporation of Boston is such an organization, and a striking evidence of its facilities is shown in the pamphlet recently issued by the company. This pamphlet is entitled "Come the Power With the Need," which illustrates and describes the rapid enlargement of three power stations for the Boston Elevated Railway Co. It will prove interesting to cite some of the methods followed in this case, as it so strongly

indicates how work of this kind is done.

It seems that the Boston Elevated Railway Co. found its generating plants were rapidly approaching the limit of overload capacity, and it would be urgently necessary to secure additional power within a short time. The Stone & Webster Engineering Corporation was asked to survey the situation and report upon the full

a great number of interdependent steps, and for each step there are always the right moments for beginning and finishing. First, there was determined the date on which each step should be finished, which, if rigidly followed, would insure the completion of the whole contract in the minimum time. Then, working backward from these predetermined dates, were set the dates for beginning the construction, for delivery of material, for shipment, for ordering, for completing plans and for beginning plans. This schedule made the pace for all departments, and was so rigidly followed that practically no time was lost in waiting for any of the material covered by the 2100 orders and contracts issued in the course of the work.

In a similar way detailed manufacturing schedules were arranged for all the more important machines. In conference with manufacturers, dates were set for finishing each part of each machine, and inspectors who followed the work through the manufacturers' shops rendered reports at frequent intervals, comparing the actual progress made with that required by the schedule. Thus ample warning of any chance of delay in shipment was obtained and immediate action to prevent it could be taken.

Other refinements in "follow-up" system were put into effect, and while they involved a large amount of time and labor, they effected their purpose, and their cost was insignificant compared with the time saved by their use.

When the contract was executed in the early part of February no plans or specifications existed. They were simply instructed to install certain generating capacity in each of three stations and to make the necessary extensions to the buildings. Late in February ground was broken. While the excavations were being made the general floor plans were worked out, the weights determined and the footings designed. While the footings were going in the detail foundation plans were worked out and the steel required first was detailed and ordered. By the time the foundations were up to grade and before the steel plans were really completed some of the steel was on the ground and was being erected. It was then June; three months had passed, and even at that time plans for the buildings had not been worked out in sufficient detail so that "lump-sum" bids could have been given intelligently. At least another month

and operating of the various public-service corporations under the management of Stone & Webster. Realizing that this organization had been to their minds fully perfected and would prove of service to others, the Engineering Corporation was formed.

New Dredge, Elevator and Washer.

The Southern Sand & Material Co. of Little Rock has constructed a combination sand and gravel dredge, according to designs and specifications by Mord Roberts and T. N. Clegg, president and vice-president of the company, who have applied for patents. This dredge is 133 feet long, 30 feet wide, 5 feet deep, having two boilers 44 inches by 26 feet, and self-propelling engines 14x48 inches with stern wheel, and when loaded draws 26 feet of water. The company says: "The equipment is a dredge, elevator and washer combined, and has a No. 8 Morris special pump with a 10-hour capacity of 500 cubic yards. The boat machinery is aft, and on the bow is a cargo box or sand bin 60x12x7 feet, with a capacity of 100 cubic yards. Material is loaded by the eight-inch pump and unloaded at dock into bins by the same pump. The loading is done in 50 minutes, the unloading in one hour. The sand bin has suction pipe made of a series of special ejectors for taking the sand out of bin, doing entirely away with the use of extra barges to carry the load; also doing away with expensive hoisting and washing machines, as we wash, screen and grade the materials in the one process of elevating it from river to our loading bins on railway tracks. Messrs. Clegg and Roberts are about to organize a company to build plants after their invention. They have now several inquiries for plants built from their design. A 500-yard capacity plant complete, bank bins and loader included, cost approximately \$20,000."

Keller Concrete Mixer.

Last week the MANUFACTURERS RECORD described and illustrated the Keller cement-block machine and the Keller visible concrete mixer. The view of the mixer was the hand machine with the water tank removed. Herewith is an illustration of the Keller visible power concrete mixer, for which the manufacturer claims important advantages for various kinds of construction where concrete is needed. The Keller Concrete Machinery Co. of Kearney, Neb., is the manufacturer of these



KELLER CONCRETE MIXER.

would have been required to finish up these details, get bids, compare them and prepare the contracts, so that a clear four months was gained at the very start.

From this brief reference to the methods followed some idea can be formed of the thorough and scientific manner in which organizations have been perfected to meet the needs of the day. It is interesting to note that the Stone & Webster Engineering Corporation was an outgrowth of all departments maintained for the handling

block and mixing equipments, and issues interesting illustrated literature describing the machines in detail.

The Business Men's League of Montgomery, Ala., Bruce Kennedy, general secretary, representing a consolidation of all the commercial and industrial bodies of the city, is circulating attractive folders giving succinct facts about the many opportunities for investors and settlers in its territory.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

The Daily Bulletin of the Manufacturers Record is published every business day in the year for the purpose of giving the earliest possible news in regard to new industrial, railroad and financial enterprises organized in the South. It is invaluable to contractors, manufacturers, engineers and all others who want to get in touch at the earliest moment with new undertakings or the enlargement of established enterprises. The subscription price is \$25 a year. All advertising contracts in the Manufacturers Record extending over a period of three months include a subscription for the length of time of the contract to the Daily Bulletin.

BRIDGES, CULVERTS, VIADUCTS

Ala., Mobile.—Mayor states city has no connection with construction of roadway and bridge recently noted.

Fla., West Palm Beach.—H. G. Geer is promoting organization of company with \$30,000 capital stock to construct drawbridge across Lake Worth from Phillips' Point to Royal Palm Ave.; structure will be 20 feet wide and have draw of 150 feet; approaches to consist of concrete walls filled with dirt; each approach to extend 200 feet into lake.

Ga., Hartwell.—J. D. Mathison, Mayor, and others are conferring with officials of Anderson, S. C., relative to construction of steel bridge across Savannah River; estimated cost \$12,000 to \$15,000.

Ky., Paris.—Louisville & Nashville Railroad, W. H. Courtenay, chief engineer, Louisville, Ky., will, it is reported, rebuild iron bridge across Houston Creek at foot of Main St.; structure of viaduct type, 700 feet long, and cost \$50,000.

Md., Baltimore.—Pennsylvania Railroad, Alex. C. Shand, chief engineer, Philadelphia, Pa., will construct ornamental reinforced-concrete bridge to connect Charles and St. Paul Sts. in connection with union station previously described under "Railway Stations." Kenneth M. Murchison, 330 Fifth Ave., New York, is preparing plans and will ask for bids.

Md., Baltimore.—Pennsylvania Railroad, Alex. C. Shand, chief engineer, Philadelphia, Pa., contemplates construction of viaduct on Lafayette Ave. between Pulaski and Smallwood Sts.; street under tracks.

Miss., Vicksburg.—City, Vicksburg Street Railway and Alabama & Vicksburg Railway, W. V. Harvey, superintendent, have begun construction work on Cherry St. viaduct recently reported; reinforced concrete construction with earth fills approaching it on north and south; span of arch along street line, 109 feet 9½ inches; height at crown from Alabama & Vicksburg Railway's rails to street railway rails, 30 feet 6 inches; arch will spring from solid concrete abutments on north and south, each 34 feet 6 inches along street by 44 feet wide and be carried on 25 piles each; arch ring will be reinforced by steel bars; roadway will be 30 feet wide between curbs with sidewalk on each side protected by ornamental concrete balustrades; estimated cost \$5,000.

N. C., Edenton.—Chowan county will construct bridge across Rockyhook Creek; length, 150 feet; W. J. Berryman, clerk ex-officio. (See "Machinery Wanted.")

Okla., Frederick.—Tillman county will construct 14 steel bridges; bids will be received until September 7; John B. Darden, County Clerk. (See "Machinery Wanted.")

Okla., Okemah.—Okfuskee County Commissioners awarded contract to Missouri Valley Bridge & Iron Co., Leavenworth, Kans., at \$25,000 to construct 24 additional bridges; E. Stine, County Clerk. (Recently mentioned.)

Okla., Oklahoma City.—City will construct bridge to carry sewer across Lightning Creek; bids received until August 31; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okla., Stillwater.—Oklahoma Public Scenic and Interurban Line, Ralph A. Sturgeon, chief engineer, 1809 Hudson Terminal Bldg., New York, will construct pile trestle in connection with railway to be built from Stillwater to Sapulpa, Okla.

S. C., Columbia.—City will construct reinforced-concrete culvert at Divine and Harden Sts.; bids opened August 23; A. E. Legare, City Engineer.

Tenn., Benton.—Polk County Commissioners will probably appropriate \$15,000 toward construction of bridge over Ocoee River at Coxles Ford.

Tex., Cuero.—De Witt county will vote November 8 on issuance of \$15,000 of bonds for construction of bridges within county and across Fifteen-mile Colletto Creek. Address County Commissioners.

Tex., Corpus Christi.—Fred Roberts and associates are arranging for construction of proposed causeway across Nueces River reef to provide communication between Nueces and San Patricio counties and irrigation for 4000 acres of land.

Tex., San Antonio.—City awarded contract to Leversedge Bridge Co., Fort Worth, Tex., at \$15,000 to construct bridge across San Antonio River at Travis St.; structure will be one span, 80 feet long; reinforced concrete upon piling foundation; asphalt floor, requiring 446 square yards of asphalt, to be laid by city. (Recently mentioned.)

Tex., San Marcos.—Road Precinct No. 1 of Hays county will vote October 18 on issuance of \$20,000 bridge and road bonds. Address Precinct Commissioners.

Tex., San Antonio.—San Antonio Traction Co. will, it is reported, rebuild bridge over Apache Creek on South Flores St.

Tex., Waco.—City postponed date of opening bids from August 23 (late stated) to September 6 for construction of 54-foot span steel girder bridge and abutments, 22-foot span steel I-beam bridge and abutments, 20-foot span reinforced concrete culvert, 7-foot span reinforced concrete culvert; P. A. Gorman, commissioner of S. S. & P. I. (See "Machinery Wanted.")

Va., Portsmouth.—City will replace wooden bridge at south end of Washington St. and over Scott's Creek, in Glasgow St., and bridge Swimming Point Creek at north end of Washington St., and Gander Creek at south end of Dinwiddie St.; all bridges will be of same construction, and consist of corrugated iron pipe imbedded in concrete; will probably require two or three lateral sections of pipe under all structures to carry flow of water; appropriation of \$3500 available; work will be under supervision of V. O. Cassell, Jr., City Engineer.

Va., Richmond.—C. P. E. Burgwyn, Rich-

mond, is engineer in charge of construction of reinforced-concrete bridge across James River; plans not complete; construction not to begin until next spring. (George C. Gregory recently noted interested.)

Va., Warm Springs.—Bids will be opened September 1 for construction of two steel bridges over Cowpasture River in Bath county; 178 feet 3 inches; two spans each; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

CANNING AND PACKING PLANTS

Ga., Chattooga County.—Georgia State Orchard Co., A. J. Stalkner, secretary-treasurer, Belington, W. Va., contemplates establishment of canning plant. (See "Land Developments.")

Ga., Macon.—Central Georgia Packing & Provision Co. will be incorporated with \$1,000,000 capital stock to establish packing plant; has option on 200 acres of land. Address, care of E. T. Hymann, secretary of Chamber of Commerce.

Tex., Sweetwater.—B. Baumgartner, Box 717, contemplates establishing cannery. (See "Machinery Wanted.")

Tex., Velasco.—Velasco Fish & Oyster Co. incorporated with \$50,000 capital stock; E. D. Fairchild, president; J. E. Hooper, vice-president; Robert Frazier, secretary; has site 250x130 feet, and will award contract for erection of two buildings.

W. Va., Wheeling.—Kalbitzer Packing Co. (recently incorporated with \$200,000 capital stock) has organized with C. Kalbitzer president; S. E. Dorsey vice-president, J. J. McCrum secretary, George Kalbitzer treasurer; will improve plant to double capacity.

CLAYWORKING PLANTS

Md., Elkton.—Fireproofing and Sewer Pipe.—National Fireproofing Co., Fulton Bldg., Pittsburg, Pa., purchased 340 acres clay land and will develop; erect model fireproofing and sewer pipe plants; details not decided.

Mo., Butler—Brick.—W. A. Vane of Humansville, Mo., submitted proposition to Commercial Club to establish brick plant.

Tex., Waxahachie.—Vitrified Brick, etc.—American Fullers Earth Co., J. T. Spencer, president, has let all contracts and purchased machinery and material for plant recently noted; will manufacture vitrified brick and paving blocks as by-product from clay not used for fullers earth; daily capacity, 25,000 bricks or block; plant to be operated in connection with present fullers earth plant.

W. Va., Williamstown.—Gas Logs, etc.—Marietta Rustic Co. incorporated with \$25,000 capital stock to manufacture gas logs and various kinds of potteryware; later expect to manufacture full line of clay rustics; George White, president; M. T. Noll, vice-president; Wm. Horn, secretary; C. W. Schramm, treasurer.

COAL MINES AND COKE OVENS

Ala., Coal City.—Seaboard Coal & Coke Co. (main offices, 25 Broad St., New York) is developing additional coal mines.

Ky., Gray.—Joseph Cottongin of Barbourville, Ky., leased and will develop 600 acres coal land; operate mine heretofore idle.

Ky., Viva.—Phenix-Jellico Coal Co., John S. Crugar, manager, East Bernstadt, Ky., will open bids August 30 for erection of plant recently reported burned; three buildings; 20x35x7, 40x40x20 and 40x40x15 feet; ordinary construction; fireproof roof; Wallace Newberger, engineer in charge; install electric plant; machinery proposals open August 31; daily capacity of plant, 600 tons screened coal. (See "Machinery Wanted.")

Ky., Warren.—Gibson Bros. of Middleshoro, Ky., leased and will develop coal lands.

Ky., Warren.—Anchor Coal Co. will develop several hundred acres coal land; begun installation of plant.

Ky., Warren.—Interstate Coal Co. of Johnson City, Tenn., leased and will develop 1200 acres coal land.

Ky., Whitesburg.—James P. and M. D. Lewis of Lewis Bros. purchased 350 acres of coal lands on Rockhouse Creek at \$40 per acre and mineral rights on property on Millstone Creek at \$20 per acre; will probably develop.

Okla., Oklahoma City.—Halley-Pasco Coal

Co. incorporated with \$12,500 capital stock by William Pasco and W. E. Halley of McAlester, Okla., and Walter Evans of Kiowa, Okla.

Tex., Carbondale.—James Harrington purchased 3500 acres coal land; will mine coal and manufacture coke; reported as planning daily capacity of 1000 tons coke.

Va., Fincastle.—E. E. Francy, vice-president of People's National Bank, Steubenville, O., is interested in recently reported purchase of Catawba Coal & Iron Co. properties; not prepared to announce development plans now; will probably determine details in September.

W. Va., Fairmont.—Virginia & Pittsburg Coal & Coke Co. will develop 250 acres coal land; pick mine; daily capacity 800 tons of coal; R. M. Hite, manager.

W. Va., Gary.—Central Pocahontas Coal Co. will open bids in November for erection of tipples, boiler and power house, and 10 tenement-houses; company's chief engineer will supervise construction; install machinery; daily capacity 1000 tons coal. (See "Machinery Wanted.")

W. Va., Gary.—United States Coal Co. will construct three steel tipples at Nos. 1, 4 and 5 plants.

W. Va., Jed.—Jed Coal Co. will double output of mining plant.

W. Va., Leckie.—West Virginia Pocahontas Coal Co. will double output of mining plant.

CONCRETE AND CEMENT PLANTS

Okla., Tulsa.—L. F. Barnes of Humboldt, Kans., and S. C. Garrett of Kansas City, Mo., secured several acres of land and will, it is reported, build Portland-cement plant with daily capacity of 1200 barrels; cost \$1,200,000; L. F. Barnes in charge of construction.

COTTON COMPRESSES AND GINS

Ark., Paris.—A. P. Kincade, P. O. Box 225, awarded contract to J. M. Campbell (address care of Mr. Kincade) for rebuilding gin recently reported burned; buildings to be 22x54 feet and 20x25 feet; ordinary construction; install machinery; cost \$2575; daily capacity 30 bales cotton.

Ga., Douglas.—Douglas Oil & Fertilizer Co., S. J. Stubbs, manager, recently reported organized with \$35,000 capital stock, awarded contract to Elliott & Hearsey (address care of company) for erection of gin 40x144 feet; guano factory, 70x200 feet; both buildings of brick; seedhouse, 60x150 feet, wood; machinery purchased; daily capacity, 100 bales cotton and 125 tons guano.

Ga., Pine Park.—Pine Park Gin Co. (recently reported incorporated with \$3000 capital stock) awarded contract to W. B. Brown, Cairo, Ga., for erection of building; 25x50 feet; ordinary construction; wood and brick; Van Winkle Machine Co. of Atlanta, Ga., engineer in charge; install 3-70-saw gin outfit; cost \$3000; daily capacity, 40 bales cotton; E. P. McBurney, president; L. L. Barwick, vice-president; T. M. Red, secretary-treasurer.

La., Lotus.—Lotus Gin Co. incorporated by W. Sidon, W. D. Richards and others.

N. C., Greenville.—Carolina Seed & Feed Co. incorporated with \$50,000 capital stock by O. L. Joyner, B. E. Moye and others.

Tex., Crandall.—Farmers' Gin & Cotton Co. incorporated with \$8000 capital stock by W. B. Murphy, M. Spellman and J. N. Gibson.

Tex., Italy.—Farmers' Union Gin Co. incorporated with \$10,000 capital stock by Joe Denahew, J. E. Steele and W. C. Radican.

Tex., Quanah.—Quanah Compress Co. awarded contract to C. S. McLean, Waco, Tex., for erection of ginning plant previously noted; 60,000 square feet floor space; mill construction; cost \$10,000.

Tex., Poyner.—Poyner Gin Co. incorporated with \$4000 capital stock by W. M. Roberts, A. J. Wiley, Jr., and W. W. Scarborough.

COTTONSEED-OIL MILLS

S. C., Due West.—Due West Oil Mill incorporated with \$25,000 capital stock; J. J. Dunn, president; M. B. Clinkscales, vice-president; J. C. Tribble, secretary.

Tex., Pleasanton.—C. T. Troll will erect oil mill.

DRAINAGE AND IRRIGATION

La., Ghens.—Detroit and St. Louis capitalists purchased 60,000 acres of marsh lands

In Lafourche parish from Golden Ranch Sugar & Cattle Co., of which John R. Ghens is president; purchase price \$600,000; plan to construct drainage system, comprising dredging of canals, construction of levees to protect against overflow, installation of pumping stations on each tract of several thousand acres, etc.; Zengel, Thomas & Sutton, New Orleans, La., are attorneys for the purchasers, whose names have not been announced.

La., Lake Arthur.—Northern and Eastern capitalists purchased 118,000 acres of marsh lands situated along lakes and gulf coast of Calcasieu, Vermillion and Cameron parishes; plan to reclaim and develop for rice farming, corn raising, truck farming and other purposes; J. L. Donahue, vice-president and manager of Irrigation Securities Co., Chicago, Ill., is interested, and that company telegraphs the Manufacturers Record that particulars are not ready for announcement.

La., New Orleans.—Sewerage and Water Board will increase capacity of Jordan Ave. pumping station and otherwise improve at expenditure of \$180,000; will also install another pumping station at parish line.

Tex., Brownsville.—Cameron County Commissioners accepted plan for construction of 42 miles of drainage canals costing about \$300,000; depth of canal to average seven feet; drainage district comprises 81,000 acres.

Tex., Corinth.—Charles C. Carnes purchased 100 acres on Little River and will install irrigation plant.

Tex., Edna.—Jackson County Commissioners voted issuance of \$100,000 of bonds for construction of drainage system and road improvements.

Tex., San Antonio.—Texaco Drilling & Irrigation Co. incorporated with \$5000 capital stock by B. G. Neville, T. A. Tirado and H. B. Allen.

ELECTRIC LIGHT AND POWER

Ala., Tusculum.—Dr. J. O. Clark and associates petitioned City Council for franchise granting certain rights and privileges concerning water-power and improvements at springs; proposed to dam spring, construct grist mill, etc.

Ark., Hamburg.—Board of Improvement District No. 2, W. L. Blanks, chairman, will receive bids until August 31 for construction of electric-light system; Willis E. Ayres, engineer, Randolph Bldg., Memphis, Tenn. (Recently mentioned. See "Water-Works" and "Machinery Wanted.")

Ark., Little Rock.—Board of Public Affairs will receive bids until noon August 29 for erecting electric-light building on city property at foot of Broadway in accordance with plans and specifications prepared by and on file with Theodore M. Sanders, 709-710 Southern Trust Bldg., Little Rock; bids to be accompanied by certified check for \$300 and be addressed to Board of Public Affairs, care of F. M. Oliver, clerk.

Fla., Lakeland.—City is completing arrangements for improvement of electric light plant. Address The Mayor. (See "Water-Works.")

La., Thibodaux.—City will open bids September 23 for construction and installation of electric-light plant recently noted; building 42x56 feet; mill construction; cost \$4000; cost of machinery \$35,000; R. J. Maquin, clerk. (See "Machinery Wanted.")

Mo., Belair.—Belair Electric Co. will increase capital stock by issuing \$25,000 worth of bonds and \$25,000 worth of preferred stock; contemplates improvements.

Miss., Jackson.—W. W. Womack contemplates developing water-power (14 to 20-foot head) to generate electricity for lighting, for operating cotton gin and grain mills, etc.; has not purchased machinery. (See "Machinery Wanted.")

Miss., Osyka.—City voted issuance of \$20,000 of bonds for construction of electric-light plant and water-works. Address The Mayor.

Mo., Higginsville.—City contemplates enlarging electric-light plant. Address The Mayor.

Mo., Kansas City.—Big Niangua Hydro-Electrical Co. owns land on both sides of Niangua River; contemplates developing 30,000 horse-power for transmission by electricity; cost of dam, water-power machinery, electrical equipment, etc., estimated at \$2,500,000; present capitalization is \$153,000, and it is proposed to increase to \$5,000,000; this to include bonds for \$2,500,000; address care of Roland E. Bruner, 914 Commerce Bldg. (Recently reported incorporated.)

Mo., La Grange.—City will construct incandescent street-lighting system. Address The Mayor.

Mo., Rolla.—City will extend electric-light

system to territory recently taken into corporate limits; M. F. Faulkner, chairman light and water committee.

Mo., Shelbyville.—City contemplates installing boiler in electric-light plant; E. P. Weaver is superintendent.

Okla., Helena.—City is considering election to vote on issuance of bonds for construction of electric-light plant. Address The Mayor.

S. C., Dillon.—City will vote soon on \$15,000 bond issue for electric-light plant; M. B. Hargrove, Mayor.

Tenn., Parkersburg.—Eastern Tennessee Power Co., through engineers in charge, J. G. White & Co., 43 Exchange Pl., New York, announced details of water-power-electrical plant heretofore reported under Cleveland, Tenn.; location is Parkersburg, 12 miles from Cleveland; dam of cyclopean concrete, 780 feet long on crest; 430 linear feet of overflow type and 350 linear feet of non-overflow type; overflow portion 110 feet above mean water, having crest at elevation of 825 feet, of usual ogee section; non-overflow portion about 13 feet higher than overflow section, and of special section to accommodate penstock intakes at top and penstocks passing from intakes to turbine below; power-house on down-stream side of non-overflow portion and be integral part of same; substructure of massive concrete, and consist mainly of piers and arches below dam; turbines located at elevation of main floor, and will discharge into tailrace under arches; superstructure of brick or stone walls, with enclosed steel columns; latter will support superstructure floors, crane runway and steel roof trusses; superstructure floors of reinforced-concrete slabs supported on steel girders and floor beams; roof slabs of reinforced concrete supported on steel purlins, and provided with suitable roof covering; power equipment will consist of four main units of normal rated capacity of 3000 kilowatts each; one 200-kilowatt exciter unit; necessary step-up transformers and switching equipment for control; each main unit consists of tandem horizontal turbine in enclosed case direct connected to 3-phase 60-cycle water-wheel type alternating-current generator; each generator will have mounted on its shaft an exciter having a capacity sufficient for its excitation; miscellaneous equipment will consist of electrically-driven traveling crane, transformer truck, gates and gate hoists, water and oil air-circulating systems, etc.; estimated cost \$2,000,000. Announcements at Chattanooga include following facts: First development near Parkersburg for 22,000 horse-power and have space for 19,000 more horse-power, a total of 32,000 horse-power expected to be ready for transmission by January 1, 1912; second development near Ducktown, to transmit 53,000 horse-power, constructed after completion of first plant; enterprise being financed by engineers in charge, J. G. White & Co., 43 Exchange Pl., New York; Hodespyl, Wallbridge & Co., 7 Wall St., New York; E. W. Clarke & Co., Philadelphia, Pa., owners of Chattanooga Railway & Light Co., and Drexel & Co., Philadelphia; J. W. Adams, Chattanooga, Tenn., original promoter of development.

Okla., Duncan.—Duncan Electric Light & Ice Co. incorporated with \$75,000 capital stock by E. S. Bessey and M. M. Dunaway, both of Oklahoma City, Okla., and John C. Keys, Cleveland, O.

Okla., Fairview.—City will extend electric-light system, install power equipment, etc.; J. N. Voorhees, City Clerk.

Tenn., Tellico Plains.—Tellico Power Co. (recently reported incorporated by Morrison B. Morrell and others) will, it is reported, construct power plant, including concrete flume and steel pipe line, to cost \$240,000; J. C. Knight in charge.

Tex., Brownsville.—City voted \$30,000 bond issue for enlargement and extension of electric-light plant and water-works. Address The Mayor. (Recently mentioned.)

Tex., Houston.—Bids will be received until noon September 12 for erection of two-story fireproof mechanical laboratory and power house for William M. Rice Institute on site on Main St.; drawings, specifications and instructions to bidders can be obtained at office of Edgar Odell Lovett, president, 1110-1112 Scanlan Bldg.; each bid to be accompanied by certified check for \$10,000. Address bids to Mr. Lovett. (Lately mentioned.)

Tex., Terrell.—City voted issuance of \$10,000 of bonds for improving electric-light plant and water-works. Address The Mayor.

FERTILIZER FACTORIES

Ala., Anniston.—Company organized with J. B. Privett, president; D. C. Cooper, vice-president; W. H. McKleroy, secretary; John

F. Boozer, treasurer; purchased and will enlarge plant of Anniston Fertilizer Co.

Ala., Montgomery.—F. S. Royster Guano Co., Norfolk, Va., is about to begin construction of plant heretofore announced; annual capacity to be about 40,000 tons fertilizer.

Ga., Douglas.—Douglas Oil & Fertilizer Co., S. J. Stubbs, manager, awarded contract to Elliott & Hearsey (address care of company) for erection of guano factory recently noted; daily capacity 125 tons. (See "Cotton Compresses and Gins.")

Ga., Reynolds.—Farmers' Warehouse & Fertilizer Co., W. M. Musselwhite, president, will erect fertilizer-mixing plant; 75x100 feet; daily capacity 100 tons of fertilizer; contract for work and material has been placed; cost \$6000; sprinkler system contract has not yet been let; will also erect 75x200-foot cotton warehouse. (See "Machinery Wanted.")

N. C., Wilmington.—Pocomoke Guano Co., Charles W. Priddy, president, Norfolk, Va., has purchased site of about 400 acres, and will, it is reported, erect fertilizer plant and warehouse.

S. C., Port Royal.—Tidewater Fertilizer & Storage Co., P. O. Box 28, Savannah, Ga., after September 1, Port Royal, proposes establishment of fertilizer factory; will occupy rented building; install machinery; daily capacity 100 tons commercial fertilizer. (Lately mentioned.)

FLOUR, FEED AND MEAL MILLS

Miss., Greenville.—Mississippi Feed Co. incorporated with \$10,000 capital stock by W. L. Templeton, J. M. Robertshaw and others.

N. C., Salisbury.—C. F. Stewart & Bros., Eufola, N. C., will erect and operate flour mill recently noted; contract for machinery awarded to Robinson Manufacturing Co., Muncy, Pa.

FOUNDRY AND MACHINE PLANTS

Ky., Louisville.—Steel Car Framing.—Louisville & Nashville Railroad Co., W. H. Courtenay, chief engineer, is reported as to build plant to manufacture steel framing for freight and passenger cars. The Manufacturers Record has letter from Mr. Courtenay saying company is not in position to give information on this subject.

Ky., Newport.—Gas Engines.—Dean Manufacturing Co. incorporated with \$1,000,000 capital stock; consolidation of Fox Reversible Gasoline Engine Co. and Dean Gas Engine & Foundry Co.

Mo., St. Louis.—Stoves.—Ringen Stove Co., E. H. Stockstrom, manager, 619 Chouteau Ave., now preparing to build \$500,000 plant lately reported; main structure 730 feet long, extending back 65 feet, two stories; all else one story high; floor space of 230,000 square feet, covering eight acres; 700 horse-power required; daily capacity, 1500 stoves; architect, E. C. Jansen.

Tenn., Knoxville.—Iron Works.—A. B. Day of Sanford-Day Iron Works is promoting establishment of iron foundry.

Tenn., Knoxville.—Iron Works.—Sanford-Day Iron Works will expend \$40,000 in improvements to plant on Dale Ave.

Va., Bristol.—Pumps.—Frost Pump Co. incorporated with \$25,000 capital stock to manufacture Frost patent pump; buildings in course of construction; Frank Miller, Broadford, Va., is president; C. W. Houser, vice-president, and H. L. Cecil, secretary-treasurer, both of Bristol.

Va., Lynchburg.—Lynchburg Foundry Co. increased capital stock from \$500,000 to \$800,000; will erect addition; 55x160 feet; three stories; fireproof construction; plans by E. C. Wiley, Lynchburg; day's labor; no further machinery needed.

GAS AND OIL DEVELOPMENTS

Ala., Birmingham.—Five Rivers Oil & Gas Co. incorporated with \$2,000,000 capital stock; William Hood, president; S. E. Deal, vice-president; W. W. Silk, secretary; secured oil and gas rights on 31 square miles of land in Tuscaloosa, Fayette and Pickens counties.

La., Shreveport.—Caddo & De Soto Oil & Gas Co. incorporated with \$150,000 capital stock by T. E. Smith, P. P. Keith, J. H. Riggs and others.

Mo., Nevada.—City has granted natural-gas franchise to W. C. Gunn of Fort Scott, Kans.

Okla., Bartlesville.—Central Fuel Oil Co. is understood to have completed proposed purchase of Priestley-Porter syndicate oil properties, including lands and wells with daily production of 9000 barrels oil; price rumored to be \$4,000,000; foreign capitalists are reported as financing new company, and that W. S. Porter of San Francisco, Cal., will

be president, with George C. Priestley of Bartlesville as vice-president and general manager; reports credit company with plan to construct pipe line to Gulf and build oil refinery at some Gulf port. (Previously mentioned.)

Okla., Nowata.—Cascade Oil & Gas Co. incorporated with \$5000 capital stock by W. V. French, J. B. Hogue and A. L. Poole.

W. Va., Clarksburg.—Catherine Thompson Oil & Gas Co. incorporated with \$10,000 capital stock by B. F. Thompson, W. D. Wamsley, Ernest Hutton and others.

W. Va., Parkersburg.—West Virginia-Oil Gas & Fuel Co. incorporated with \$25,000 capital stock by J. W. Jones, J. E. McNeal, M. Lowe and others.

W. Va., Parkersburg.—Bills Oil & Gas Co. incorporated with \$25,000 capital stock by J. L. McGee of New York city; C. C. Roberts of Petroleum, W. Va.; H. L. Stout, J. L. Laird and R. E. Bills of Parkersburg; office, 26 4th St.

ICE AND COLD-STORAGE PLANTS

Ga., Macon.—Central Georgia Packing & Provision Co. will erect ice and cold-storage plant. (See "Canning & Packing.")

La., New Orleans.—Schwarzschild & Sulzberger Co. (main office, 45th St. and 1st Ave., New York), has purchased site adjoining present plant and will erect addition.

Miss., Charleston.—Charleston Compress & Storage Co. (recently incorrectly noted as Charleston Cold Storage Co.) has elected W. G. Harvey president, S. J. Baker vice-president, William Quarles secretary; capital stock, \$30,000.

Okla., Chickasha.—Everybody's Ice & Cold Storage Co. changed title to Chickasha Ice & Cold Storage Co. and increased capital stock from \$60,000 to \$100,000; all machinery purchased; daily capacity, 50 tons of ice.

Okla., Duncan.—Duncan Electric Light & Ice Co. incorporated with \$75,000 capital stock by E. S. Bessey and M. M. Dunaway of Oklahoma City, Okla., and John C. Keys of Cleveland, O.

IRON AND STEEL PLANTS

Ala., Gadsden.—Iron Furnaces, etc.—Southern Iron & Steel Co., W. H. Hassinger, president, Birmingham, Ala., is reported as to blow in open-hearth furnaces and blooming mill about September 15.

Ala., Thomas.—Iron Furnace.—Republic Iron & Steel Co., Frick Building Annex, Pittsburgh, Pa., has blown in furnace No. 1; reported that furnace No. 3 will soon be blown out for repairs.

Okla., Oklahoma City.—Steel, etc.—Capital Steel & Iron Co. incorporated with \$20,000 capital stock by Jacques Dur, T. R. Anderson and L. W. Miller.

Va., Goshen.—Iron Furnace, etc.—Goshen Iron Co., A. J. Moxham, president, Dupont Bldg., Wilmington, Del., purchased Chapman Iron, Coal & Coke Co. properties it has been operating under lease; includes Victoria furnace at Goshen, coal and iron lands in Virginia, coal land in West Virginia, etc.

Va., Roanoke.—Bridge Works.—Virginia Bridge & Iron Co. will increase capital stock from \$800,000 to \$1,500,000 in order to pay for improvements and for enlargement of branch plants completed during past 18 months.

LAND DEVELOPMENTS

Ala., Birmingham.—Birmingham Acreage Co. incorporated with \$24,000 capital stock by W. C. Gwin, Thomas C. McGahey and Nesbit Hambaugh.

Ark., Murfreesboro.—Memphis, Dallas & Gulf Townsite Co. incorporated with \$25,000 capital stock; W. M. Dodson, president, Hot Springs, Ark.; M. L. Stanley, vice-president, Kimberly, Ark.; C. S. Coleman, secretary, Geneva, N. Y.

Ga., Chattooga County.—Georgia State Orchard Co., recently reported incorporated with \$50,000 capital stock, elected W. D. Zinn president, E. R. Dyer vice-president, A. J. Stalnaker secretary-treasurer; main office, Belington, W. Va.; will develop 215 acres of land as peach orchard; orchard consists of 32,000 trees; contemplates cannery.

Md., Baltimore.—Green Spring Valley Land Co. incorporated with \$15,000 capital stock by Arthur C. Montell, Catonsville, Md.; Jacob Hann, Jr., Catonsville, Md., and John F. Sippel, 25 South St., Baltimore.

S. C., Aiken.—John Hitchcock has donated land about 15 miles from Aiken, to be developed as experimental farm under supervision of Agricultural Commission of South Carolina; buildings to be erected are mule stables and barn; 300x100 feet; to form three sides of square; contain boxes for 50 mules; a

upper story for feed and storage; will also erect church to accommodate 200; construction begun; completed before winter; plans by John Laird, Aiken.

Tex., Cross Plains.—Cross Plains Townsite Co. incorporated with \$10,000 capital stock by H. J. Cureton, S. F. Bond and S. C. Barr.

Tex., Houston.—L. W. Link has purchased 129 acres of land and will organize company to develop for residence section; construct sidewalks, sewers, water-works, boulevard, etc.; estimated cost of developments, \$100,000.

Tex., Houston.—Melado Land Co. incorporated with \$300,000 capital stock; S. H. Jackson, president; D. F. Boyles, vice-president; John Hamman, secretary; purchased land in Monte Christo and Melado survey; colonize portion and develop remainder in feedstuffs, nuts, fruits, etc.

Tex., Port Lavaca.—Gulf Coast Fruit Land Co. incorporated with \$20,000 capital stock by William Mallory, Willett Wilson and Allen Jackson.

Tex., Fremont.—Falfurrias Nursery & Development Co. incorporated with \$40,000 capital stock by D. H. Dashiell, W. R. Dashiell and T. Wesley Hook.

Tex., San Antonio.—Quana Development Co. incorporated with \$25,000 capital stock by Chris Hagelstein, Arthur F. Decker and L. A. Hough.

Va., Pulaski.—Gem City Land Co. incorporated with \$15,000 capital stock; J. N. Bosang, president; W. C. Price, vice-president; J. F. Wyso, secretary.

LUMBER MANUFACTURING

Ark., Helena.—Scott Manufacturing Co. will establish plant for manufacture of furniture lumber; construction begun.

Ark., Gordon.—J. R. Abbott will install sawmill with daily capacity of 20,000 feet lumber.

Ark., Homan.—J. H. Findlay, Naples, Tex., purchased hardwood timber on 1000 acres of land; estimated to cut 2000 feet to acre; purchase price about \$10,000; timber will be cut in sawmills at Hope, Ark.

Fla., Jacksonville.—Stringfellow Lumber Co. organized by G. F. Finger, J. D. Stringfellow and A. B. Oliver; will establish lumber plant for yellow pine exclusively; capacity 15,000 feet daily.

Ky., Louisville.—Southern Veneer Manufacturing Co. will, it is reported, rebuild veneer plant at 22d and Standard Aves. recently reported burned at estimated loss of \$65,000.

La., East Carroll Parish.—De Sha Lumber Co. purchased timber tract estimated to contain 40,000,000 feet of hardwood lumber; railroad will be constructed into property and logs taken to plant in Arkansas City, Ark., where band mill with capacity of about 50,000 feet is in operation; Hyde Lumber Co., C. W. Hyde, president, will handle entire product of De Sha Lumber Co.

La., Lott.—Wilson & Cochrane Sawmill Co. will establish plant, comprising sawmill, planing mill, and shingle and lath factory; construction begun.

Miss., McComb.—Dickey Lumber Co. incorporated with \$30,000 capital stock by L. Z. Dickey, V. C. Dickey and others.

N. C., Elk Park.—White Lumber Co., J. A. Beeber, president, Williamsport, Pa., will open bids September 1 for erection of eight-foot band mill, commissary, houses, etc.; ordinary construction; metal roof; will manufacture hardwoods; install sawmill machinery; construct eight miles of railroad; Southern office will be removed from Butler, Tenn., to either Johnson City, Tenn., or Elk Park, N. C.

Okla., Mannsville.—Mannsville Lumber Co. incorporated with \$10,000 capital stock by E. V. Wilverton and R. B. Hill of Mannsville, C. T. Parringer and W. S. Fraley of Ardmore, Okla., and C. R. Smith of Richmond, Va.

Tenn., Knoxville.—Miller Lumber Co., of which J. Marion Miller is president, and Broadway Manufacturing Co. are planning to consolidate and establish lumber plant capitalized at \$25,000.

Tex., Ulmer.—Sparkman Manufacturing Co. (organized by L. Sparkman, W. L. Newton, G. W. Hays and V. L. Webb, all of Camden, Ark.) purchased for about \$300,000 property of Lake Creek Lumber Co., comprising mill with capacity of 70,000 feet daily, 60,000,000 feet of timber, etc.; Mr. Webb now in Ulmer to assume charge.

Va., Honaker.—Lewis Creek Planing Mill Co. and Honaker Planing Mill will consolidate; Lewis Creek plant will be removed to site of Honaker mill and operated under chartered name of Lewis Creek Planing Mill Co.; present building being remodeled and

enlarged, and other buildings erected in which to install equipment of both mills.

W. Va., Matewan.—Bigley Lumber Co., Reed Bigley, president, Pomeroy, O., will establish lumber plant on Peters Creek, near Matewan, and develop 12,000-acre timber tract which has been leased.

W. Va., Morlan.—Morlan Manufacturing Co. incorporated with \$5000 capital stock by Arthur Kelley, Thomas Whetsell, Ralph H. Allen and others.

MINING

Ala., Bluffton.—Iron.—Alaga Mining, Power & Development Co. incorporated with \$25,000 capital stock by Y. A. Dyer (president), Eugene F. Enslen (treasurer), A. D. Cecil and G. Chisolm, all of Birmingham, Ala.; leased 6000 acres iron land near Bluffton and Langdon; will install steam shovels in gravel ore and for other ore; engage contractors; has begun construction of washer and will build another after first is completed; D. F. Gibson is in charge of construction.

Ark., Yellville.—Zinc.—William Richardson of Helena, Ark., will erect reduction mill.

Ga., Rome.—Brown Ore.—R. G. Peters Mining Co. purchased 5000 acres of brown-ore land and will develop; construct ore washer, etc.; daily output to be 400 tons.

Md., Monrovia.—Copper.—Lingano Copper Co. is name of company recently noted organized with Thomas A. Dunshe president; will develop 64 acres; open bids soon for machinery; J. O. Hendricks, secretary, Frederick, Md., may be addressed. (See "Machinery Wanted.")

Tex., Rockport.—Stone.—Paul Stone Co. (recently reported incorporated with \$5000 capital stock by D. M. Picton, W. F. Paul and others) will develop 700 acres of land; daily output, 500 tons of stone; main office, R. F. D. No. 8, Box 99, San Antonio, Tex.; address proposals to W. F. Paul. (See "Machinery Wanted.")

Va., Harrisonburg.—Manganese.—Southern Manganese Mining Co. incorporated with \$100,000 capital stock; T. K. Sebrill, president, Harrisonburg; J. H. Thompson, vice-president, Front Royal, Va.; T. P. Beery, secretary, Harrisonburg; will develop 258 acres of land. (See "Machinery Wanted.")

MISCELLANEOUS CONSTRUCTION

La., New Orleans.—Seawall, etc.—City will make improvements at West End, including seawall 2700 feet long, 14 feet high, 8 feet wide at base and 18 inches at top; 400,000 cubic yards of filling are to be placed behind wall and complete drainage system installed; bids opened September 19; W. J. Hardee, City Engineer.

La., New Iberia.—Dredging.—City invites bids until September 5 for excavating 800,000 cubic yards from New Iberia Southern Drainage Canal; J. S. Power, Mayor.

Tex., Galveston.—Channel Improvement.—United States Government will expend \$91,080 in enlarging Port Bolivar Channel; to be deepened 30 feet, widened 200 feet; turning basin, 1000 square feet; bids opened September 10; Major G. P. Howell, United States Engineer in charge of Galveston district, Galveston. (Recently noted.)

Tex., Texas City.—Bids will be opened September 19 for dredging Texas City channel; plan is to dredge channel distance of 650 feet along enlarged pier of Texas City Transportation Co.; also widen to 200 feet and deepen to 27 feet from Bolivar roads to wharves; \$100,000 appropriated by Congress; Major George P. Howell, United States engineer in charge of Galveston district, Galveston, Tex. (See "Machinery Wanted.")

W. Va., Tunnelton.—Tunnel.—Baltimore & Ohio Railroad, A. W. Thompson, chief engineer, Baltimore, Md., awarded contract to Talbot & Bennett, Fairmont, W. Va., to construct tunnel; 4190 feet long and 83 feet wide with bed 29 feet below present one; require excavation of about 900,000 cubic yards of earth. (Recently mentioned.)

W. Va., Wheeling.—Pier.—Bids will be opened September 15 for constructing three concrete ice piers in Kanawha River; F. W. Altstaetter, Captain, Engineers, U. S. Engineer Office. (See "Machinery Wanted.")

W. Va., Wheeling.—Tunnel.—City & Elm Grove Railroad, J. W. Smith, chief engineer, will construct tunnel through Wheeling Hill from 17th St. to Manchester, for use of Elm Grove division of railway.

MISCELLANEOUS ENTERPRISES

Ala., Andalusia.—Automobiles.—Andalusia Motor Car Co. incorporated with \$10,000 capital stock by A. P. McGowan, W. C. Randolph and Ed T. Albritton.

Ark., Malvern.—Hardware.—Malvern Hard-

ware Co. incorporated with \$50,000 capital stock; John W. Lee, president; R. P. Graham, vice-president; W. T. Murray, secretary.

Ky., Owensboro.—Elevator.—Arthur Ferriell and John G. Bell will erect \$30,000 elevator.

La., New Orleans.—Dredging.—Lafourche Dredging Co. incorporated with \$25,000 capital stock; Johnston Armstrong, president; Roger Holmes, vice-president; Wilton E. Aymar, secretary.

La., St. Francisville.—Corn Elevator.—Richardson & Percy will erect corn elevator; construction begun.

Md., Baltimore.—Contracting.—John Cowan, Inc., incorporated with \$50,000 capital stock by John Cowan, 106 West Madison St.; Thos. Hicks, Woodbourne Ave. near Ready Ave., and others; to contract for buildings.

Md., Baltimore.—Garage.—E. D. Edmonston, superintendent of construction Consolidated Gas, Electric Light & Power Co., Lexington and Liberty Sts., Baltimore, will supervise construction of garage recently noted; one story; 29x32 feet; brick; slag roof; semi-fireproof construction; steam heat; electric lighting; cost \$4000; plans by Mr. Edmonston.

Md., Frederick.—Abattoir.—Frederick City Abattoir Co. (previously reported incorporated with \$50,000 capital stock by T. B. Haywood and others) accepted plans by P. A. Kley, New City Hotel, Frederick, for construction of abattoir; structural steel frame; reinforced concrete floors; brick exterior and interior walls; cost \$60,000, including machinery; plans and specifications ready in 10 days.

Md., Laurel.—Laundry.—E. Rosenfield Manufacturing Co. (shirts) will install laundry equipment.

Mo., Dalton.—Hardware.—Dalton Hardware & Lumber Co. incorporated with \$6000 capital stock by Geo. Heeler, W. J. Humphreys and A. F. Friesz.

Mo., Harrisonville.—Publishing.—Harrisonville Publishing Co. incorporated with \$6500 capital stock by C. H. Pearson, A. L. Burner and Arthur Conger.

Mo., Kansas City.—Contracting.—Contracting Machinery Co. incorporated with \$50,000 capital stock by J. W. Hoover, Louis A. Miller and Howard N. Hansen.

Mo., St. Louis.—Films.—O. T. Crawford Film Co. incorporated with \$100,000 capital stock by O. T. Crawford, J. C. Graham, E. L. Thomas and others.

N. C., Wilmington.—Construction, etc.—Grossman-Mahler Architectural & Construction Co. incorporated with \$125,000 capital stock by E. F. Grossman, C. P. B. Mahler and others.

N. C., Winston-Salem.—Automobiles.—Carolina Cadillac Company incorporated with \$50,000 capital stock by G. C. Thomas, K. E. Shore and D. H. Blair.

Okla., Oklahoma City.—Automobiles.—McCool-Mercer Motor Co. incorporated with \$10,000 capital stock by M. F. McCool, R. B. Mercer and M. L. Mercer.

Okla., Oklahoma City.—Cattle Guards.—Richardson Cattle Guard Co. incorporated with \$5000 capital stock by C. J. Richardson, J. L. Jones and others.

Tenn., Chattanooga.—Hardware.—Green Hardware Co. incorporated with \$50,000 capital stock by R. A. Palmer, Franklin C. Stovall, Wm. S. Palmer and others.

Tenn., Chattanooga.—Bottling.—Lookout Bottling Co. incorporated by O. L. Bunn, C. E. Bailey, G. M. Price and others; capital stock, \$5000.

Tenn., Jackson.—Garage.—Jackson Garage Co., 341 North Royal St. (recently reported incorporated with \$10,000 capital stock), has elected F. M. Spiller president-treasurer, J. A. Pope vice-president, J. M. Glenn, Jr., secretary; will occupy building formerly occupied by Southern Motor Works. (See "Machinery Wanted.")

Tenn., Memphis.—Garage.—E. M. F. Memphis Co. organized with W. E. Flanders president, Ernest L. Jacoby vice-president, Robert M. Brownson secretary; awarded contract to Lee Bros. of Memphis for erection of garage; 75x150 feet; one story; concrete and white enameled brick.

Tenn., Nashville.—Construction.—Capitol Construction Co. incorporated with \$5000 capital stock by Gus W. Maddux, Charles H. Butler, Jr., Alfred T. Levine and others.

Tex., Galveston.—Steamship Line.—Southwestern Steamship & Banana Co. incorporated with \$100,000 capital stock by Henry Galey of Galveston and Henry C. King, Jr., of San Antonio, Tex.

Tex., Mexia.—Garage.—R. J. Jackson and others will erect garage and machine shop.

Tex., San Antonio.—Trunks and Bags.—Ex-

celisor Trunk & Bag Co. incorporated with \$1000 capital stock by Frank L. Simon, Harry E. Hull and James K. Hull.

Tex., Seguin.—Garage.—Blumberg Auto. Co. will erect garage; concrete blocks; include blacksmith and paint shops.

Va., Dillwyn.—Farming Supplies.—W. A. Moss Company, Inc., is name of company to handle farm supplies; W. R. Gary is president; authorized capital stock, \$100,000. (Recently noted under "Miscellaneous Factories.")

Va., Gate City.—Printing.—Gate City Printing Co. incorporated with \$5000 capital stock; D. C. Sloan, president; H. H. Williams, vice-president; E. A. Hoge, secretary.

Va., Richmond.—Dental Supplies.—Vose Dental Co. incorporated with \$50,000 capital stock; C. F. Vose, president; L. K. Walz, vice-president; E. F. Vose, secretary.

W. Va., Huntington.—Ferry.—Central Ferry Co. incorporated with \$10,000 capital stock by U. T. Cox, W. E. Neal, H. M. Bloss and others to establish ferry across Ohio River.

W. Va., Huntington.—Laundry.—J. A. Taylor Laundry Co. incorporated with \$10,000 capital stock by J. A. Taylor, J. R. Damron, J. M. Lovett and others; will install laundry machinery; cost \$4000. Address J. A. Taylor, 826 Third Ave., Huntington.

MISCELLANEOUS FACTORIES

Ala., Birmingham.—Automobiles.—Smith Motor Car Co. incorporated with \$12,500 capital stock; Charles S. Sibley, president; S. L. Smith, secretary and treasurer.

Ala., Evergreen.—Remedy.—Newberry Tetter Remedy Co. incorporated by Luman W. Savage, Henry J. Savage and Luman W. Savage, Jr.

Ark., Little Rock.—Dredge, etc., Plants.—Mord Roberts and T. N. C. Clegg, president and vice-president of Southern Sand & Material Co., plan organization of company to build combined dredge, elevator and washer they have patented.

Fla., Tampa.—Fruit Juices, etc.—American Citrus Products Co. of San Diego, Cal., will establish plant for manufacturing lemon, orange and grapefruit juice and essential oils.

Ga., Newnan.—Tobacco.—Swint-Davis Leaf Tobacco Co. incorporated with \$3000 capital stock by Claude D. Swint, Willis J. Davis and Ira Bradley.

Ky., Paducah.—Tobacco.—A. D. Dickerson awarded contract at \$13,999 to G. W. Katterjohn of Paducah for erection of tobacco factory recently mentioned; main building 180x60 feet, 100x25 feet and L 95x80 feet; mill construction; equipment to include drying machinery, hydraulic press, 100-horse-power boiler, 45-horse-power engine, etc.; building plans by W. L. Brainard of Paducah.

La., Baton Rouge.—Paraffine.—Standard Oil Co. of Louisiana, 26 Broadway, New York, is now proceeding with construction of paraffine department recently announced; new department is addition to oil refinery; all work by company and purchases are made currently as needed.

La., Moreauville.—Sugar Refinery.—T. A. Lemone of Moreauville, G. W. Sentell of Bunkie, La., and T. J. Perkins of Red Fish, La., are reported as planning construction of central refinery with daily capacity of 750 tons sugar at cost of \$300,000.

La., New Orleans.—Rice Huller.—Couch Rice Huller Co. incorporated with \$30,000 capital stock; A. B. Couch, president; Ben Klan, secretary; H. Prince, vice-president.

Md., Baltimore.—Buggy Tops, etc.—Baltimore Buggy Top Co., 700 Pennsylvania Ave., awarded contract to McLaughlin Bros., 915 Bolton St., Baltimore, for erection of factory and salesroom building at Mt. Royal and Maryland Aves.; 75x124 feet; concrete and roofing slag; exterior of pressed brick with stone trimmings; electric lighting; steam heating and electric elevators; cost \$20,000; plans by McLaughlin Bros. (Lately mentioned.)

Md., Baltimore.—Bottling.—Monumental Brewing Co., 3900 East Lombard St., has purchased site on Baltimore St. between 5th and 7th Sts., and will erect bottling plant; 400x100 feet; brick; four stories; electric lights; electric elevators; heating plant, etc.; cost \$70,000.

Md., Baltimore.—Clothing.—S. G. B. Manufacturing Co. incorporated with \$10,000 capital stock by Abraham Sagner, 2547 McCulloh St.; Isidor Blondheim, 1412 Madison Ave., and Nathan Gundersheimer, 1534 Bolton St.

Md., Hagerstown.—Creamery.—Caseln Manufacturing Co., Hanover Bank Bldg., New York, has not sufficiently definite plans for proposed Hagerstown plant to warrant statement at this time; unauthorized reports say

company will invest \$50,000 for plant to separate cream for shipment to company's New York factory.

Mo., Laurel—Boxes.—E. Rosenfield Manufacturing Co. will install machinery for manufacturing shirt boxes.

Miss., Clarksdale—Tobacco.—American Tobacco Co. of Mississippi incorporated with \$10,000 capital stock by Charles Scott, Jr., Dan Brewer and others.

Miss., Georgetown.—Georgetown Manufacturing Co. incorporated with \$75,000 capital stock by Hower Rhymes, C. D. Rhymes, W. J. Davis and others.

Miss., Natchez.—Sharp Manufacturing Co. incorporated with \$25,000 capital stock by W. C. Sharp, R. B. Sharp and V. H. Sharp.

Mo., St. Louis—Chemicals.—Star Chemical Co. incorporated with \$100,000 capital stock by Charles J. Ammann, W. H. Croseley and C. J. Stettler.

Mo., St. Louis—Automobiles.—Van Cleave Motor Car Co. incorporated with \$6000 capital stock by Giles R. Van Cleave, Thomas S. McPheters, Jr., Charles M. Polk and Harry E. Van Cleave.

Mo., St. Louis—Lead.—National Lead Co. will erect additional buildings on Manchester Ave.; \$11,000 shed, \$5000 stable and \$6000 oilhouse.

Mo., St. Louis.—Van Kempel Manufacturing Co. incorporated by Fred Van Kempel and S. F. G. Smith.

N. C., Mt. Airy—Tobacco.—Surry County Dry Prize Co. incorporated by R. W. Davis and others to establish dry prizeeries, stemmeries, etc.

Okl., Bartlesville.—Bottles and Glass.—Bartlesville Bottle & Glass Co. incorporated with \$10,000 capital stock by J. W. Lynch, Geo. Crawford, R. D. Cleary and others.

Okl., Oklahoma City—Stock Food.—Southwestern Stock Food Co. incorporated with \$100,000 capital stock by W. H. Purse, E. V. Robnett, J. F. Moore and others.

S. C., Spartanburg—Candy.—Georgia-Carolina Candy Co. incorporated with \$10,000 capital stock by W. A. Yarbrough and W. A. Garland of Hendersonville, N. C.

Tenn., Memphis—Carbonic-acid Gas.—Liquid Carbonic Co., Chicago, Ill., is understood to have decided to build \$400,000 carbonic-acid gas plant after completion of Chicago plant, now in course of construction. The Manufacturers Record has telegram from company as follows: "Not ready to say anything whatever about proposed Memphis plant."

Tex., Beeville—Creamery.—Beeville Creamery Co. incorporated with \$7500 capital stock; E. J. Kinkler, president; Carl Heldenfels, vice-president; C. R. Mitchell, secretary; completed plant.

Tex., Bryan—Farm Tools, etc.—W. F. Irvine will establish plant for manufacturing combination farm tool; address, care of Commercial Club.

Tex., Fort Worth—Macaroni.—Standard Macaroni & Manufacturing Co. increased capital stock from \$15,000 to \$25,000.

Tex., Quanah—Brooms.—E. A. Clousnitzer, proprietor Quanah Ice and Light Works, will erect broom factory.

Tex., Sweetwater—Beds, Mattresses, Fencing, etc.—B. Baumgartner, Box 717, contemplates establishing factory for weaving wire fencing, manufacturing wire bedsprings, cutting excelsior, shaping furniture, etc. (See "Machinery Wanted.")

Tex., Texas City—Sugar Refinery.—Texas Sugar Refining Co. plans are understood to call for construction of steel and reinforced concrete buildings; Garland B. Miller of Falfurrias, Tex., is interested, and his Falfurrias company (Miller Bros. Company) telegraphs the Manufacturers Record that sugar refining plant will cost \$900,000, have a daily capacity of 2000 barrels of sugar, a capital stock of \$1,800,000, and that the engineer in charge of plans, construction, equipment, etc., is the Eastwick Engineering Co., Ltd., 82 Beaver St., New York. Texas City, Port Arthur, Beaumont and Houston are under consideration as location. (Incorporation and plans briefly reported previously.)

W. Va., Charleston—Carbon Black.—Continental Oil Co., Dabney Davis, director, Lewisburg, W. Va., has 1800 acres of land with gas production of about 15,000,000 feet daily, and will establish plant for manufacturing carbon black.

W. Va., Whorley (not a postoffice).—Excelsior and Mattresses.—Piney Excelsior Manufacturing Co., Hinton, W. Va. (recently reported incorporated with \$25,000 capital stock), will establish excelsior factory and install machinery; daily capacity 10 to 20 tons excelsior; Dr. W. L. Barkdale, president; J. H. Miller, vice-president; H. Ewart, secretary-treasurer; W. E. Osborne, manager.

J. H. Miller, vice-president, Bellepoint, W. Va., may be addressed. (See "Machinery Wanted.")

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, SHEDS, ETC.

Ala., Mobile.—Bids are invited for alterations and fireproof additions to Monroe Park car shops, property of Mobile Light & Railroad Co.; plans and specifications may be obtained at office of Stone Bros., architects, 109 Enstein Bldg.

Ga., Valdosta.—Georgia Southern & Florida Railway, W. C. Shaw, Jr., chief engineer, Macon, Ga., awarded contract to J. C. Halsema, Jacksonville, Fla., to build car shops, car sheds and office building; main shop building will be 60 feet wide and 120 feet long. (Recently mentioned.)

Tex., Cleburne.—Daniel Hewitt will erect brick car barn for electric street railway.

Tex., Marshall.—Marshall & East Texas Railway, R. J. Lockwood, chief engineer, awarded contract to W. H. Pugh of Marshall for concrete work on blacksmith and machine shops; 100x54 feet; concrete walls and floor. (Previously mentioned.)

W. Va., Bluefield.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., has begun erection of proposed addition to roundhouse; will construct 29-foot addition around entire building to give engines 93 feet under roof; cost about \$36,000.

ROAD AND STREET WORK

Ala., Birmingham.—Jefferson County Board of Revenue will receive bids until noon August 30 for road improvements aggregating \$12,790; roads to be improved include Johns county line road, cost \$4000; Brookside and Mineral Springs road, \$2000; Pool's Ford road, \$2000; Water-works Hill road, \$1540, etc.; work will include grading for greater part; Johns county line road to be macadamized; Brookside and Mineral Springs road will be improved for distance of three miles, while majority of other roads will be improved for one mile; bids to be addressed to Jefferson County Board of Revenue or County Engineer J. W. Gwin.

Ala., Florence.—City will construct crushed limestone roadway and cement sidewalks on Royal and Sherrod Aves., between Seven Points and Cypress Mill Rd.; also crushed-limestone roadway and combined cement curb and gutter and cement sidewalks on Walnut St., between College St. and Military Rd.; bids will be received until August 29; J. B. White, City Clerk. (See "Machinery Wanted.")

Ala., Gadsden.—City will construct 8020 square yards cement sidewalks and 2820 square yards cement sidewalks (old cement walk to be removed and new walk laid), relay 1500 square yards 18-inch hexagonal blocks, 404 square yards brick walk, and 250 square yards flagstone with cement walk; bids will be received until August 29; Wilburn Hill, City Engineer. (See "Machinery Wanted.")

Ala., Linden.—Marengo county will vote in November on issuance of \$175,000 of bonds for road construction. Address County Commissioners.

Ala., Laverne.—S. Kinsley states Crewshaw county will not vote any time soon on bond issue for road construction; recently noted.

Ala., Montgomery.—Montgomery county will grade and drain Narrow Lane Rd. from Woodley Rd., five miles south; bids will be opened August 29; J. T. Bullen, County Engineer. (See "Machinery Wanted.")

Ala., Selma.—Dallas County Commissioners awarded contract to J. W. Cook & Co., Montgomery, Ala., at \$16,714.26 for construction of seven miles of road from Selma to Mulberry bridge, which is dividing line between Dallas and Autauga counties; work under direction of W. S. Keizer, superintendent of roads.

Ark., Little Rock.—Commissioners of West 23d St., Carl Voss, chairman, awarded contract to I. P. Shelby of Little Rock for paving West 23d St. from Main to Wolfe St.; brick pavement, with concrete base and filler; estimated cost \$40,000; W. F. Reichardt, consulting engineer, 102 Louisiana St. (Recently mentioned.)

Fla., Palatka.—Putnam County Bond Trustees will open bids September 2 for construction of hard-surfaced road; R. F. Ensey, county engineer. (Recently mentioned. See "Machinery Wanted.")

Fla., St. Augustine.—City will construct 12,000 yards asphalt paving; will invite bids for material; contemplates employing local labor; Eugene Masters, Mayor.

Ga., Atlanta.—Paul Norcross and B. M.

Hall, engineers, of Atlanta, are considering preliminary details for construction of proposed road from Atlanta to Jacksonville, Fla.

La., Donaldsonville.—City contemplates laying about 15 miles of concrete sidewalks. Address The Mayor.

La., New Orleans.—City will pave with cressed wood blocks on concrete foundation roadway on river front from Jackson Ave. to St. Mary St.; bids will be received by Board of Commissioners of Port of New Orleans, 601-602 Ithieria Bank Bldg., until September 6; Hugh McCloskey, president of board. (See "Machinery Wanted.")

Md., Annapolis.—City will pave West St. with vitrified brick; about 3050 square yards; bids opened; J. C. Little, City Engineer.

Md., Baltimore.—State Roads Commission, Union Trust Bldg., awarded contract to E. Parke Lindsay, Portsmouth, Va., at \$58,461 for work on Belair Rd., calling for 800 feet of vitrified-brick pavement and three and a half miles of macadam with pitch binder. (Mr. Lindsay's address not stated in recent item.)

Miss., Moss Point.—City will issue \$15,000 of street improvement bonds; C. M. Fairley, city clerk.

Miss., New Albany.—Union county voted bond issue for road construction. Address County Commissioners.

Mo., St. Louis.—Board of Public Improvements awarded contracts for construction of 42 streets: For improving with vitrified paving brick—Pacific, to Hiram Lloyd Building & Construction Co., \$159,78; Arsenal, to Webb-Kunze Construction Co., \$37,183.80; Minnesota, to Ruecking Construction Co., \$8362.52; 21st, to Daniel Murphy, \$12,768.74; McKee, to Fruin-Bambrick Construction Co., \$37,186.30; Lempe, to Ruecking Construction Co., \$6168.30; 21st, to Daniel Murphy, \$10,359.02; Bulwer, to Daniel Murphy, \$10,456.25; Victoria, to Hiram Lloyd Building & Construction Co., \$13,685.38; Duncan, to Fruin-Bambrick Construction Co., \$8995; Alaska, to Ruecking Construction Co., \$15,778; Compton, to G. Eyermann & Bro., \$5905.28; Idaho, to G. Eyermann & Bro., \$27,232.68; Juniata, to Hiram Lloyd Building & Construction Co., \$19,526.20; Alabama, to Hiram Lloyd Building & Construction Co., \$9724.50; 23d, to Daniel Murphy, \$2793.99; Maiden La., to Daniel Murphy, \$5198.35; Natural Bridge, to Fruin-Colton Contracting Co., \$27,412.80; St. Louis, to Hiram Lloyd Building & Construction Co., \$10,554.96; Greer, to Bambrick Bros. Construction Co., \$4243.86; Minnesota, to Eyermann & Bro., \$6705.96. For reconstructing following streets with vitrified paving brick: Natural Bridge Rd. from Grand to Spring, to Fruin-Colton Contracting Co., for \$4172.70; Glasgow, to Harry F. Heman, for \$17,952.95; 20th, from Washington to O'Fallon, to James E. Perkinson, for \$24,890.46; 20th from Cass to Branch, to Skralinka Construction Co., for \$52,355.90; 20th from Branch to Salisbury, to William H. Redemeyer, for \$11,259.90. For improving following streets with bitulithic: Arsenal, to Granite Bituminous Paving Co., for \$25,294.68; Portis, to Granite Bituminous Paving Co., for \$9512.21; Bent, to Granite Bituminous Paving Co., for \$13,505; Semple, to Granite Bituminous Paving Co., for \$21,272.24; Union, to Granite Bituminous Paving Co., for \$27,650.79. For reconstructing following streets with Southern long-leaf yellow-pine blocks: McPherson, to G. Eyermann & Bro., for \$27,466.43; 12th from Franklin to Tyler, to G. Eyermann & Bro., for \$25,437.74; 12th from Tyler to Hebert, to Granite Bituminous Paving Co., for \$31,168.40; contractors all of St. Louis; total nearly \$600,000; work is under supervision of Street Commissioner Travilla.

Mo., Webb City.—City awarded contract to Webb City Paving & Improvement Co., Webb City, to curb, gutter and lay cement sidewalks on North Webb St., and to Lloyd Burries, Joplin, Mo., for brick paving of alley between Daugherty and John Sts.; city will also grade and pave with asphalt macadam North Allen St.; W. E. Smith, City Engineer.

Mo., Kansas City.—Jackson County Commissioners awarded following contracts for construction of 6½ miles of rock roads: Hiler Rd., 3 miles, to Colyer Bros., \$17,074; Mastin School Rd., 3½ miles, to Davidson Bros., \$17,363; both contractors of Kansas City.

Okl., Guthrie.—City contemplates laying 8000 lineal feet of cement sidewalks. Address The Mayor.

Okl., Duncan.—Stephens county will vote November 8 on issuance of \$20,000 of bonds for road improvements. Address County Commissioners. (Recently mentioned.)

N. C., Whiteville.—City will construct 12,000 square yards of street; bids received until September 15; W. Ross Davis, Mayor. (See "Machinery Wanted.")

S. C., Greenville.—Committee, consisting of W. G. Shirine, C. O. Allen, W. L. Gassaway and others, is promoting reconstruction of road between Greenville and Hendersonville, N. C.

S. C., Greenville.—City awarded contract to Atlantic Bitulithic Co., Richmond, Va., to pave street with bitulithic.

S. C., Greenville.—City Council decided to pave 12,000 yards of side streets with bitulithic and block of Buncombe St. with asphalt. Address The Mayor.

Tenn., Memphis.—City Commissioners adopted ordinances providing for paving of Walker, Mannassas, South Cooper, Olive and other streets; Heskell Weatherford, City Engineer.

Tex., Ballinger.—Runnels county will vote on issuance of \$90,000 of bonds for road improvements in Precinct No. 1. Address County Commissioners.

Tex., Dallas.—City will pave Preston St. and Swiss Ave.; bids received until August 31; J. B. Winslett, City Secretary. (See "Machinery Wanted.")

Tex., Edna.—Jackson County Commissioners voted issuance of \$100,000 of bonds for road construction and system of drainage.

Tex., Fort Worth.—City and railway companies have signed trackage agreement, and General Supply & Construction Co. of Fort Worth, contractor, will proceed with paving of North Main St. ordered by City Commissioners about a year ago.

Tex., Fort Worth.—City Commission appropriated \$12,000 for paving street intersections on College Ave.; street is being paved its entire length of two miles.

Tex., San Marcos.—Road Precinct No. 1 of Hays county will vote October 18 on issuance of \$20,000 of road and bridge bonds. Address Precinct Commissioners.

Tex., Sweetwater.—Sweetwater Road District will vote September 24 on issuance of \$100,000 of bonds for road improvements. Address County Commissioners.

Tex., Sweetwater.—Noian County Commissioners awarded contract for 2000 feet of concrete curb and sidewalk around courthouse.

Tex., Taylor.—Williamson County Commissioners will expend \$300,000 to construct 60 miles gravel road; Frank Matthews, County Engineer; machinery and equipment purchased; contract recently noted awarded to Texas Building Co., Fort Worth, Tex.

Tex., Temple.—City awarded contract to Ockander Bros. of Temple to pave French Ave. and North Main St.

Va., Lynchburg.—City will lay granolithic sidewalks; bids will be opened August 29; H. L. Shaner, city engineer. (See "Machinery Wanted.")

Va., Norfolk.—Berkley Ward Improvement Committee recommended to City Council paving Berkley Ave. from Main to 7th St. with asphalt at cost of \$14,820, and curbing and guttering of South Main St. at cost of \$1440.

Va., Front Royal.—Warren county contemplates voting on issuance of \$30,000 of bonds for construction of macadamized road to Rappahannock county line on top of Blue Ridge; Rappahannock county has voted bond issue for construction of similar road to same point. Address Warren County Commissioners at Front Royal.

Va., Leesburg.—Bids will be opened August 26 for construction of three to four miles of macadam road in Purcellville and toward Silcott Springs in Loudoun county; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

Va., Lynchburg.—J. R. Ford & Co. of Lynchburg are lowest bidders at \$17,613.45 for paving 14th St. with tar macadam and Taylor and Wise Sts. with brick; will require 3500 cubic yards excavation, 1100 square yards brick pavement and 4500 square yards tar macadam; 3600 lineal feet concrete curb, 3600 lineal feet concrete gutters, 575 lineal feet granite crossings, etc.; H. L. Shaner, City Engineer. (Recently mentioned.)

Va., Norfolk.—Board of Control requested W. T. Brooke, City Engineer, to prepare specifications and proposals for paving of Hanover and Main Sts. under appropriations of \$3076.50 and \$5925, respectively.

Va., Portsmouth.—Street Committee will soon award contract for construction of granolithic sidewalk in Park View, on Leckie St. and Webster Ave.; V. O. Caswell, Jr., City Engineer.

W. Va., Parsons.—Tucker county will construct road to replace present Slip Hill road; length 1 9-16 miles; bids will be opened September 3; R. P. Pearson, County Engineer. (See "Machinery Wanted.")

W. Va., Thomas.—R. P. Pearson, County Engineer for Tucker county, advises that he

has made plans for proposed two miles of macadam road between Thomas and Davis; with finances not yet arranged, details are not completed.

SEWER CONSTRUCTION

Ark., Searcy.—City will award contract August 29 for construction of sewer system; estimated cost \$30,000. Address The Mayor. (Previously mentioned.)

Fla., Pensacola.—Pensacola Gas Co. will not construct sewer main lately mentioned; report was an error.

Fla., St. Augustine.—City Council voted to construct sanitary disposal plant sewerage system instead of gravity system, as at first proposed; city will vote November 22 on issuance of \$100,000 of bonds; W. W. Lyon, engineer, Jacksonville, Fla. (Recently mentioned.)

Ga., Eastman.—City voted issuance of \$50,000 of bonds for construction of sewerage system and school improvements. Address The Mayor. (Recently mentioned.)

Ga., Rockmart.—City voted \$10,000 bond issue for construction of sewer system; I. F. Mundy, Mayor. (Recently mentioned.)

Ga., Sparta.—City voted \$40,000 bond issue for sewerage and water-works; John D. Walker, Mayor. (See "Water-works.")

Ky., Louisville.—Commissioners of Sewerage awarded contract to Guild & Co., Chattanooga, Tenn., to construct section "A" of Western Interceptor; sewer will be 3500 feet long and cost about \$50,000. (Recently mentioned.)

Ky., Louisville.—City will open bids September 2 for construction of section "F" Beargrass Interceptor, Contract No. 73; P. L. Atherton, chairman Sewerage Commission. (See "Machinery Wanted.")

Ky., Winchester.—City will construct 8½ miles of sewers varying in size from 6 to 15 inches diameter, together with manholes, lampholes, etc.; bids will be opened August 30; \$65,000 of bonds to be issued; Charles E. Collins, consulting engineer, Drexel Bldg., Philadelphia, Pa.; J. A. Hughes, Mayor. (See "Machinery Wanted.")

La., New Orleans.—City will construct drainage system in connection with other improvements at West End; W. J. Hardee, City Engineer. (See "Miscellaneous Construction.")

La., New Orleans.—Newport Contracting & Engineering Co., contractor, Newport News, Va., has begun installation of proposed \$30,000 sewerage system in United States custom-house; L. N. Noland is company's representative; P. F. Cullinane is Government engineer in charge.

Md., Baltimore.—North Forest Park Sewerage Co., organized with \$6000 capital stock to construct sanitary sewer system, including small pumping station; Thomas B. Marshall, secretary-treasurer Title Guarantee & Trust Co., 643 Calvert Bldg., is president.

Md., Baltimore.—Hampden Sewerage Co., recently reported incorporated with \$3000 capital stock, will construct sanitary sewer in territory bounded by 33d St., Wellington, Chestnut and Elm Aves. at estimated cost of \$3000; sewer will connect with city's proposed sewer system; 12-inch terra cotta piping; contract awarded; Robert F. Reynolds is president of company.

Miss., Gulfport.—City will construct sanitary sewerage system for Central high school and system of drainage at Evergreen Cemetery; George M. Foote, City Engineer.

N. C., Thomasville.—Jewel Cotton Mills plans construction of septic tank, etc., for mill. (See "Machinery Wanted.")

Okla., Oklahoma City.—City will construct lateral sewers in Capitol Hill, Military Park Addition, Parker and Colcord's Addition, etc.; also contract beds for sewer disposal plants of Deep Fork sanitary sewer system; bids received until August 31; Bob Parman, City Clerk. (See "Machinery Wanted.")

S. C., Greenville.—City will extend sanitary sewer system; bids to be opened September 10; W. E. Beattie, chairman Sewer Commissioners. (See "Machinery Wanted.")

Tenn., Jellico.—City will vote September 1 on issuance of \$20,000 of sewer and water bonds. Address The Mayor. (Recently mentioned.)

Tex., Dallas.—Municipal Commissioners awarded contract to Dallas Lime & Gravel Co. at \$355 to lay 10-inch sewer from Akard St. eastward on Elm St. to Wilson Bldg.

Tex., El Paso.—City Council accepted plans for sewer and garbage-disposal plants to cost \$100,000; F. H. Todd, City Engineer.

Tex., Fort Worth.—City Commissioners voted to construct deep storm sewer on Main St., between 13th and 16th Sts.

Va., Norfolk.—Board of Control requested

W. T. Brooke, City Engineer, to prepare estimate on cost of constructing sewers on Fauquier and Louisa Sts., Berkeley ward.

TELEPHONE SYSTEMS

Ky., London.—London Telephone Co. plans erection of telephone line from London to Harboursville, distance 33 miles.

Ky., Ritchie.—Henry Callahan and others are interested in construction of telephone line from Ritchie to Hazard.

Md., Hagerstown.—Mount Aetna Rural Telephone Co., incorporated by C. Harry Keller, Wm. O. Funk, Frank Smith and others.

N. C., Coleridge.—Coleridge Telephone Co., incorporated with \$10,000 capital stock by D. H. Lambert and others.

N. C., Harrisburg.—Harrisburg Telephone Co., recently reported incorporated with \$10,000 capital stock, will construct about 10 miles of line connecting with Concord and probably Charlotte, N. C.; will install equipment; J. L. Stafford, president; J. E. Morrison, vice-president; J. F. Stafford, secretary-treasurer. (See "Machinery Wanted.")

N. C., Woodlawn.—Roanoke-Chowan Telephone Co., incorporated with \$50,000 capital stock by D. L. Minton and others.

Okla., Moody.—Moody Telephone Co., incorporated by W. M. Combs, W. T. Williams, Walter R. Gourd and others.

Tenn., Sparta.—Home Telephone Co., organized with Sam Johnson, president; C. W. Roberts, vice-president; J. L. James, secretary; has franchise for telephone system.

Tex., Brownsville.—Southwestern Telegraph & Telephone Co. will rebuild telephone system.

Tex., Temple.—D. C. McGowan, Belton, Tex., and associates will construct telephone system; distance of about 100 miles.

Va., Madison.—Madison Telephone Co., incorporated with \$5000 capital stock; J. B. Graves, president; M. L. Hoffman, vice-president; G. L. Gibbs, secretary.

W. Va., Bluefield.—Postal Telegraph-Cable Co., G. W. Ribble, superintendent, Richmond, Va., will construct extension of lines from Bluefield to Kenova, distance of 200 miles; estimated cost \$500,000.

TEXTILE MILLS

Ala., Alexander City.—Hosiery.—J. W. Belyou contemplates erecting mill to knit hosiery. (Lately reported.)

Ala., Ragland.—Cotton Goods.—Brown Cotton Mills incorporated with \$250,000 capital stock by W. T. Brown, J. A. Thomas, S. P. Hagan and R. A. Hemphill; previously reported to be organized for erection of 10,000-spindle mill with 500-horse-power steam plant.

N. C., Concord.—Cotton Yarns.—Roberta Manufacturing Co., recently reported incorporated with \$100,000 capital stock, purchased Dowell Manufacturing Co. and plant of 4064 ring spindles; John C. Rankin, president, Lowell, N. C.; P. M. Keller, vice-president, Concord.

N. C., Kings Mountain.—Cotton Yarns.—Phoenix Manufacturing Co., incorporated with \$300,000 capital stock by J. C. Plunk of Cherokee Falls, S. C., and others; acquires Lulu Manufacturing Co. plant of 10,000 producing spindles, 4320 twisting spindles, 30 cards, etc.

N. C., Mocksville.—Cotton Goods.—F. H. White of Charlotte, N. C., is reported to have submitted proposition for organization of \$225,000 cotton-mill company.

N. C., Newton.—Hosiery.—Fidelity Hosiery Mills Co. chartered with authorized capital stock of \$125,000 and \$30,000 paid in; acquires Newton Hosiery Mills of 350 knitting machines, dyeing and finishing equipment, etc.; D. M. Ausley, president; E. Morrison, vice-president, both of Statesville, N. C.; R. P. Freeze, secretary-treasurer, of Newton.

S. C., Columbia.—Press Cloth.—F. T. Parker, previously mentioned in connection with plans for press-cloth mill, is president of National Hygienic Manufacturing Co., Builders' Exchange, Philadelphia, Pa.; has not yet made arrangements for proposed Southern plant.

S. C., Greenwood.—Cotton Cloth.—Panola Cotton Mills (previously reported incorporated with \$300,000 capital stock), organized with F. S. Evans, president; George H. Taylor, vice-president, and C. L. Beaudrot, Jr., secretary, has arranged for erection of brick and reinforced concrete building by J. L. Masters, Anderson, S. C.; install 10,000 to 15,000 spindles and about 300 looms; electrical power, electricity being obtained from Greenwood transmission lines of Southern Power Co. of Charlotte, N. C.; machinery contracts awarded. (Recently mentioned.)

S. C., Liberty.—Sheetings, etc.—Calumet Manufacturing Co. awarded contract to Galivan Building Co., Greenville, S. C., for erection of weaveroom addition; two-story building, 80x104 feet, of mill construction; will install 200 looms; steam power; architect for addition, J. E. Sirrine of Greenville, S. C. (Incompletely reported in June.)

Tenn., Knoxville.—Hosiery, etc.—Standard Knitting Mills has plans for additional building for cotton-yarn mill; three stories; brick and timber construction; gravel roof; 75x210 feet; also boiler and engine room, dye-room and warehouse; probably ready for bids August 25; estimated cost \$50,000. (Full details of Standard enlargement reported recently.)

Tenn., Maryville.—Hosiery.—Maryville Hosiery Mills' additional equipment (mentioned last week) includes 78 knitters, sulphur dye plant, hot press, singeing machine, etc.; all purchased.

Tex., Cuero.—Sheetings, etc.—Cuero Cotton Factory has not yet completed reorganization plan; will possibly arrange for proposed doubling; now has 5000 ring spindles, 100 narrow looms, 60 broad looms, etc. (Mentioned in July.)

Tex., Sherman.—Cotton Goods.—Sherman Cotton Mills, recently reported incorporated, has building, with boilers, engines, pulleys and shafting; plans to install textile machinery. Address care of Birge-Forbes Company.

Tex., Sweetwater.—Knit Goods.—B. Baumgartner, Box 717, contemplates establishing plant to manufacture knit goods. (See "Machinery Wanted.")

Va., Danville.—Hosiery.—Danville Knitting Mills will build addition to cost \$10,000; 73 feet 7 inches by 100 feet; one story; mill construction; gravel roof; architects, McLaughlin, Pettit & Johnson, Lynch Bldg., Lynchburg, Va., and National Bank Bldg., Danville, Va.

Va., Fredericksburg.—Cassimeres, etc.—Washington Woolen Mills Co. will probably rebuild mill reported burned; plant had 4876 spindles, 50 broad looms, 5 sets cards, steam-power plant, dyeing equipment, etc.; John C. Melville is manager.

WATER-WORKS

Ala., Albertville.—City voted issuance of \$25,000 of bonds for construction of water-works. Address The Mayor. (Recently mentioned.)

Ark., Hamburg.—Board of Improvement District No. 2, W. L. Blanks, chairman, will receive bids until noon August 31 for construction of water-works, to include 50,000-gallon tank 100 feet high; also for electric-light system; cost of both plants being estimated at \$30,000; Willis E. Ayres, engineer, Randolph Bldg., Memphis, Tenn. (Recently mentioned. See "Machinery Wanted.")

Ark., Searcy.—City will award contract August 29 for construction of water-works; estimated cost \$50,000. Address The Mayor. (Previously mentioned.)

Fla., Lakeland.—City is completing arrangements for improvement of water and light plant, for which \$18,000 of bonds have been issued; also for extension of water mains, for which \$22,000 of bonds are available. Address The Mayor.

Fla., Port Tampa City.—City voted issuance of \$25,000 of water-works bonds. Address The Mayor.

Ga., Rockmart.—City voted \$25,000 bond issue for construction of water-works; I. F. Mundy, Mayor. (Recently mentioned.)

Ky., Harlan.—City is prepared to consider offers for water-works franchise; pure water can be piped from Pine Mountain, 2½ miles distant, and from sufficient elevation for gravity system. Address Harlan Commercial Club, Will Ward Duffield, secretary.

La., Slidell.—City will issue water-works bonds. Address The Mayor.

Md., Hancock.—City will, it is reported, reject bids and advertise for new proposals for construction of water-works; plans by Peniman & Fairley, 411 Marine Bank Bldg., Baltimore, Md.; R. J. McCandlish, Clerk. (Mentioned in July.)

Miss., Jackson.—Alkanasia Water Co., incorporated with \$50,000 capital stock by W. L. Brown, J. G. Ford, G. E. Martin and others.

Miss., Leakesville.—Greene county will construct water tank and tower, gasoline engine, pump and pumphouse, and lay all necessary piping for use of county jail for sanitary purposes; bids will be received until September 5; S. R. McKay, Clerk. (See "Machinery Wanted.")

Miss., Oayka.—City voted issuance of \$30,000 of bonds for construction of water-works and electric-light plant. Address The Mayor.

N. C., Tarboro.—City will install 180 tons six-inch and 120 tons eight-inch iron pipe for water main; John A. Weddell, Clerk. (See "Machinery Wanted.")

Okla., Fairview.—City will expend \$50,000 for extension of water-works and electric-light system; improvements will include extension of water mains and transmission lines, erection of water tower, installation of power equipment, etc.; issue bonds; J. N. Voorhees, City Clerk. (Recently mentioned.)

Okla., Krebs.—City voted \$10,000 bond issue for extension of water mains. Address The Mayor.

S. C., Timmonsville.—City will vote on issuance of bonds for water-works system; Z. T. Kershaw, Mayor.

Tenn., Jellico.—City will vote September 1 on issuance of \$90,000 of water and sewer bonds. Address The Mayor. (Recently mentioned.)

Tex., Brownsville.—City voted issuance of \$30,000 of bonds for enlargement and extension of water-works and electric-light plant. Address The Mayor. (Recently mentioned.)

Tex., Terrell.—City voted issuance of \$10,000 of bonds for improving water-works and electric-light plant. Address The Mayor.

Tex., St. Francis.—Gulf, Colorado & Santa Fe Railway, F. Merritt, chief engineer, Galveston, Tex., has authorized four deep wells with pumphouse, etc., at estimated cost of \$11,000.

Tex., Tioga.—City voted August 20 on \$10,000 bond issue for waterworks. J. L. Webb, Mayor.

WOODWORKING PLANTS

Ala., Demopolis.—Shafts and Poles.—Kentucky capitalists have, it is reported, contracted with Mitchell-Kirven Lumber Co. for installation of wagon shaft and pole factory; Mitchell-Kirven Company will saw hickory and furnish power.

Ala., Jackson.—Veneers.—Jackson Veneer Co. is name of company recently noted to be organized by Joseph Loranx and others; erect buildings; mill construction; erection under supervision of superintendent; plans by T. A. Edens, Jackson; install machinery; daily capacity 75,000 feet high-grade veneers; S. H. Andrews, president; B. H. Warren, vice-president; Joseph Loranx, secretary-manager; C. C. Pritchett, treasurer. (See "Machinery Wanted.")

Ark., Benton.—Staves.—Greenville Stave Co. will install \$10,000 stave mill; to develop 25,000 acres of timber land in Saline county.

Fla., Taft.—Hoop Poles.—Prosper Colony Manufacturing Co. contemplates manufacturing cypress hoop poles. (See "Machinery Wanted.")

Ky., Owensboro.—Cooperage.—Owensboro Cooperage Stock Co. incorporated with \$30,000 capital stock by George W. Stout, W. R. Stout, T. M. Baker and C. W. Stout to manufacture staves, barrels, etc.

Mo., Poplar Bluff.—Cooperage.—H. D. Williams Cooperage Co. contemplates construction of four mills.

Mo., St. Louis.—Buggies.—C. J. Shea has closed negotiations for erection of building for Regal Buggy Co., at present at 3d and Chouteau Sts.; structure will be four stories, contain 78,000 square feet of floor space and cost \$50,000.

N. C., Coleridge.—Furniture.—Coleridge Manufacturing Co. incorporated with \$7500 capital stock by J. M. Caviness and others.

S. C., Conway.—Crates and Boxes.—Conway Crate & Box Co. incorporated with \$10,000 capital stock by W. A. Freeman, J. W. Little and T. J. Bell.

Tenn., Nashville.—Carriages.—Waller & Porter are having plans prepared by Thomas S. Marr of Nashville for carriage factory at Fifth Ave. and Sparkman St.; building will be of brick; gravel roof; concrete floors; cost \$10,000; Foy-Proctor Company and John P. Read of Nashville, contractors.

Va., Lynchburg.—Furniture.—Weaver Furniture Co. incorporated with \$50,000 capital stock; W. S. Weaver, president; R. C. Blackford, vice-president; M. J. Ruckel, secretary-treasurer.

W. Va., Wheeling.—Grain Cradles.—J. A. Schwob Company will rebuild burned portion of grain-cradle factory; damage estimated at \$10,000.

BURNED

Ala., Montgomery.—Thomas F. Murphree's general iron and wood working plant; estimated loss, \$5000.

Ala., Selma.—Hotel Albert Co.'s building; loss \$30,000.

Okl., Cornish.—T. J. Dulaney's gin.

S. C., Greeleyville.—M. D. De Lorme's store and warehouse; loss \$10,000.

Tenn., Lebanon.—Gulf Cedar Co.'s lead-pen-til plant; loss \$25,000 to \$30,000.

Tenn., Sparta.—Matlock Thompson's store, loss \$500; L. O. Young's store, loss \$300; store owned by Mrs. Quarles of Nashville, Tenn., occupied by Potter Bros., loss \$500; Mrs. Flora Rhea's store, loss \$300; Kinsey Bros.' store, loss \$300.

Tex., Camden.—W. T. Carter's sawmill; estimated loss \$50,000.

Tex., Goliad.—W. B. Martin's gin; loss \$12,500.

Tex., Hearne.—E. J. Morris' dwelling; loss \$500.

Tex., Houston.—Capt. G. W. Crowder's dwelling, 1416 Boulevard; loss \$400.

Tex., Navasota.—H. Schumaker Oil Co.'s plant; loss \$30,000.

Tex., Pilot Grove, R. F. D. from White-wright.—Sheb Andrews' gin; loss \$300.

Va., Fredericksburg.—Washington Woolen Mills Co.'s mill of 4876 spindles, 50 broad looms, 5 sets cards, dyeing equipment, steam-power plant, etc.

W. Va., Wheeling.—I. A. Garee's store; loss \$4500.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

D. C., Washington.—L. E. Breuninger, 325 18th St. N. W., will erect apartment-house on Euclid St. N. W.

Ky., Louisville.—L. Kellar will erect apartment-house corner 1st St. and Magnolia Ave.; three stories; 12 apartments; building will be 30x190 feet; three stories; ordinary and mill construction; low-pressure steam heat; cost \$30,000; plans by Chas. S. Kellar (address, care of owner); construction by owner.

Mo., St. Louis.—Samuel Boyardski will erect two-story apartment-house on Juniata St.

Tenn., Memphis.—Dr. H. R. Bynum has plans by Francis M. Barton, 821 Medinah Temple, Chicago, Ill., for apartment-house recently noted; 130 feet frontage; all rooms to face streets; bathrooms and halls to have white tiling; steam heat; electric lighting; install vacuum system of cleaning; refrigerator service; interior hardwood, birch and mahogany; community laundry; cost \$30,000; let contract soon. (See "Machinery Wanted.")

Mo., St. Louis.—C. E. Lund will erect apartment-house on Farlin Ave.

Tenn., Memphis.—Dr. Hugh R. Bynum, 40 Byrd Bldg., is receiving bids for erection of apartment-house at McLemore Ave. and South Wellington St.; three stories; two wings; 90 apartments of four and five rooms; brick and stone; central heating plant removed from structure; bathrooms and hall floors white tiling; interior finish hardwood, birch, oak and mahogany; cost \$300,000; plans by Francis M. Barton, 821 Medinah Temple, Chicago, Ill. (Lately mentioned.)

Tex., Port Arthur.—Captain Tyrrell of Beaumont, Tex., will erect apartment-house.

ASSOCIATION AND FRATERNAL

Ala., Birmingham.—Y. M. C. A., T. H. Johnston, chairman, is having plans prepared by Harry Wheelock and Chattuck & Husey of Chicago, Ill., for erection of proposed building.

Ga., Atlanta.—Benevolent and Protective Order of Elks, John J. Whiteside, chairman building committee, will expend \$50,000 to erect lodge building recently noted; 55x100 feet; four stories and basement; steam heat; electric lighting; hand-power elevator; plans being prepared by MacEachron & Trobridge, 532 Candler Bldg., Atlanta; date of opening bids not set.

La., New Iberia.—Ancient Free and Accepted Masons have plans and will soon invite bids for construction of proposed lodge at Main and Julia Sts.; three stories; brick, with marble base; cost \$40,000.

La., New Orleans.—Woodmen of the World, J. B. Pike, secretary pro tem, has plans for erection of home; four-story; 12x70 feet; ornamental stucco; first floor to contain dining room, library, gymnasium and swimming tank 35x50 feet; second floor have assembly hall; seating capacity 1000, with gal-

lery 100 feet long; estimated cost \$100,000. (Previously mentioned.)

Tex., Houston.—North Side Lodge, No. 339, Knights of Pythias, will erect castle hall; two stories; brick.

Tex., Marshall.—Ancient Free and Accepted Masons will erect temple; cost \$18,000.

W. Va., Welch.—Welch Lodge, No. 58, I. O. O. F., will erect lodge; three stories; brick and stone; cost \$3000.

BANK AND OFFICE BUILDINGS

Fla., Marianna.—Florida Land & Title Co., W. A. McIne, president, will erect office building; 33x80 feet; fireproof construction; cost \$3500; J. A. Ormond, secretary, may be addressed. (See "Machinery Wanted.")

Ga., Fitzgerald.—American State Bank, R. L. Duckworth, member board of directors, reported to erect building. (See "Machinery Wanted.")

Ky., Harlan.—Kenton Corporation, Chas. H. Davis, president, South Yarmouth, Mass., has no definite plans for erection of office building recently noted.

La., Erath.—Bank of Erath, V. L. Caldwell, president, Abbeville, La., will erect bank building; one story; 27x55 feet; pressed brick.

S. C., Aiken.—Bank of Western Carolina, H. M. Dibble, president, is proceeding with erection of bank and office building recently noted; three stories; brick; cost \$20,000; day's labor.

Tex., Abilene.—L. A. Fire, Dallas, Tex., will remodel and erect addition to office building; estimated cost \$7500.

Tex., Dallas.—J. B. Wilson will erect addition to Wilson Bldg., for Titcher-Gottinger Company, now in present structure; annex will be 12 stories, 50x100 feet.

W. Va., Bluefield.—Norfolk & Western Railway, C. S. Churchhill, chief engineer, Roanoke, Va., plans to erect addition to division offices at cost of \$9000.

CHURCHES

D. C., Washington.—Calvary Methodist Episcopal Church, Columbia Rd. near 15th St. N. W., has plans by Harding & Upman, 729 15th St. N. W., Washington, for Sunday-school building; addition will be 42x87 feet; two stories and basement.

Fla., St. Augustine.—First M. E. Church South will erect edifice; W. C. Middleton, G. E. Hood and others, building committee.

Ga., Dublin.—Methodist Church has plans by C. A. Thompson of Dublin for remodeling edifice; cost about \$18,000.

Ga., Taylorsville.—Baptist congregation will erect \$8000 brick edifice to replace burned structure. Address The Pastor, Baptist Church.

Ga., Savannah.—Epworth Methodist Church, Rev. Loy Warwick, pastor, will erect edifice; W. M. Crafts, chairman building committee.

La., Shreveport.—Noel Memorial Methodist congregation will erect \$40,000 edifice; contract will soon be awarded. Address The Pastor, Noel Memorial Methodist Church.

Md., Baltimore.—Boundary Ave. Methodist Episcopal Church, East 42d St. North, near York Rd., is having plans prepared for edifice; two stories and basement; 63x55 feet; Gothic style of architecture; stone and brick; concrete foundation; terra-cotta or slate roof; ornamental stained glass windows; interior to have hardwood finishings, polished oak, tiling and mantel work; hot-water heating; electric lighting; estimated cost \$30,000; Willard E. Harn Company, 213 North Calvert St., and John Cowan, 106 West Madison St., both of Baltimore, are included among contractors estimating.

Md., Elkridge.—Grace Protestant Episcopal Church will have new plans prepared by George Worthington, 522 Jaw Bldg., Baltimore, Md., for edifice; bids received have been rejected; new plans will call for stone building with ornamental glass windows; Gothic architecture; estimated cost of construction, \$15,000. (Recently mentioned.)

Md., Frederick.—Asbury Methodist Episcopal Church, Rev. L. J. Valentine, pastor, will erect edifice.

S. C., Aiken.—John Hitchcock has plans prepared by John Laird, Aiken, for edifice to accommodate 200. (See "Land Developments.")

S. C., Kingstree.—Methodist Episcopal Church, South, will erect edifice; Building Committee will receive bids until noon, September 15, in accordance with plans and specifications on file at Bank of Kingstree and office of Todd & Benson, Charleston, S. C.; each bid to be accompanied by certified

check for \$150, payable to F. W. Rairey, chairman.

Tex., Dallas.—First Presbyterian Church has plans by C. D. Hill & Co., Wilson Bldg., Dallas, for edifice at Wood and Harwood Sts.; both fronts to be faced with Bedford stone, with terra-cotta trimmings; eight monolithic columns; main roof and roof of dome of glazed tile; main auditorium and balconies will have seating capacity of 1200, and, including Sunday-school apartment, total seating capacity of 1500 to 1600; estimated cost \$100,000; bids may be invited within 30 days. (Previously mentioned.)

Tex., Munday.—First Baptist Church will expend \$3000 to erect edifice recently noted; 52x64 feet; frame; stoves; acetylene gas lighting; plans by W. N. Meridith, Stamford, Tex.; bids opened.

Va., South Norfolk.—Christ Disciples' Church will erect edifice. Address the pastor, Christ Disciples' Church.

CITY AND COUNTY

Ga., Augusta.—Engine-house.—City will expend \$10,000 to erect engine-house recently noted; ordinary construction; steam heat; electric lighting; plans by G. L. Preacher, Augusta; bids opened August 22; E. G. Kallbelsch, chairman City Council, may be addressed.

Ky., Bowling Green.—Home.—Fiscal Court of Warren county will erect County Home.

Md., Cumberland.—City Hall.—City has accepted plans by Holmboe & Lafferty, Clarksburg, W. Va., for rebuilding burned city hall; 70x70 feet; two stories with dome and basement; mill construction; stone; cost \$75,000. (Lately mentioned.)

Okl., Durant.—Jail.—Bryan county is reported as contemplating vote on issuance of \$100,000 bonds for courthouse and jail. Address Commissioners.

Okl., Konawa.—City Hall.—City contemplates erection of city hall to cost \$7000. Address The Mayor.

Tenn., Memphis.—Police Station.—Police Station Commission, Dave Hale, chairman, will receive bids until October 17 for erection of central police station on 2d St.; plans and specifications on file at office of Shaw & Pfeil, 1503 Tennessee Trust Bldg., Memphis; certified check for \$5000 to accompany each bid.

Tenn., Memphis.—Police Station.—H. A. Bell, Memphis, is lowest bidder at \$14,300 for erection of suburban police station. (Lately mentioned.)

Tenn., Memphis.—Engine-house.—City awarded contract at \$16,677 and \$13,487 to J. E. Hollingsworth, Memphis, for erection of two suburban engine-houses. (Lately mentioned.)

Tex., Austin.—Market-house.—City contemplates erection of market-house and auditorium at 5th and Guadalupe Sts.; two stories; fireproof. Address The Mayor.

Tex., Lockhart.—City, M. C. Jeffrey, secretary, has plans by T. L. Hodges, Lockhart, for city hall recently noted; 40x70 feet; fireproof construction; stoves; electric lighting; cost about \$10,000; bids opened August 23.

Va., Clifton Forge.—Jail.—City will receive bids until September 1 for construction of courthouse and jail; plans by H. C. Allen, Hot Springs, Va. (See "Courthouses.")

Va., Richmond.—Home.—Council Committee on Relief of Poor accepted plans by Charles M. Robinson, Richmond, for erection of proposed operating-room of city home; cost \$8000; bids for construction will be opened August 29.

COURTHOUSES

Ky., Brooksville.—Bracken Fiscal Court will vote on issuance of \$35,000 bonds for erecting courthouse. Address County Commissioners.

Okl., Durant.—Bryan county is reported as contemplating vote on issuance of \$100,000 bonds for courthouse and jail. Address County Commissioners.

Tex., Mt. Vernon.—Franklin County Commissioners' Court has plans for erection of proposed \$40,000 courthouse.

Va., Clifton Forge.—City will receive bids until September 1 for erection of courthouse and jail to cost \$30,000; plans and specifications on file after August 25 at office of H. C. Allen, architect, Hot Springs, Va., and at office of A. B. Daves, Clifton Forge; certified check, \$500.

DWELLINGS

Fla., Pensacola.—T. L. Hardin, manager Red Snapper Sauce Co., has plans by Blount Construction Co., Pensacola, for erection of residence in Englewood Heights; cost \$6000.

Fla., Tampa.—G. T. Henderson of Tampa Real Estate and Loan Association has plans

by Bonfoey & Elliott, Tampa, for erection of dwelling at Newport and Morrison Aves.; two stories; brick; cost \$10,000.

Ga., Atlanta.—T. H. Williams has plans by Lella R. Wilburn, 305 Peters Bldg., Atlanta, for dwelling recently noted; 60x60 feet; two stories; eight rooms; frame; brick veneer; steam heat; gas and electric lighting; cost \$5000; bids opened August 24.

Ga., Atlanta.—John S. Owens has plans by Lella R. Wilburn, 305 Peters Bldg., Atlanta, for proposed dwelling; 38x48 feet; concrete blocks; steam heat; electric lighting; cost \$3000; date of opening bids not set.

Ga., Atlanta.—John S. Owens has plans by Lella R. Wilburn, 305 Peters Bldg., Atlanta, for proposed dwelling; 32x45 feet; frame; hot-air heat; electric lighting; cost \$3000; date of opening bids not set.

Ga., Augusta.—Evans Redfern will erect two dwellings at Cleveland and Emmett Sts.

Ga., Savannah.—W. N. Pratt will erect dwelling at Vernon View.

Ga., Savannah.—Harry Strachan will erect dwelling at Vernon View.

Ga., Savannah.—Eldred Stinkins will erect dwelling at Vernon View.

Ga., Savannah.—Willis Wilder will erect dwelling at Vernon View.

Ga., Savannah.—E. W. Bell will erect dwelling at Vernon View.

Ga., Savannah.—W. B. Stubbs will erect dwelling at 1120 Park Ave. E.

Ky., Greenville.—W. A. Wickliffe has plans by Joseph & Joseph, Louisville, Ky., for erection of dwelling; two stories and basement; brick and concrete veneer; bids for construction opened soon.

La., New Orleans.—Mrs. Ellen Brady will erect double frame residence; cost \$3200.

La., New Orleans.—Joseph Mann will erect frame dwelling; cost \$3000.

La., New Orleans.—Joseph Lavy will erect two-story residence; cost \$3500.

La., New Orleans.—P. Touchard has plans by J. Chas. Valadie, 1439 Crete St., New Orleans, for four-room cottage; one story; cost \$2000.

La., New Orleans.—Henry Sellen has plans by J. Chas. Valadie, 1439 Crete St., New Orleans, for eight-room dwelling; two stories; gas and electric lighting; cost \$3000.

La., New Orleans.—J. D. Wirth will erect residence; cost \$10,000.

La., New Orleans.—Meyer S. Prince, Ponchartraine, La., has plans for erection of residence.

La., New Orleans.—Henry Sellen has plans by J. Chas. Valadie, 1439 Crete St., New Orleans, for two double two-story dwellings; six rooms each; frame slate roof; cost \$3800 each.

Md., Baltimore.—A. C. Mylander, 526 Law Bldg., is having plans prepared by Jacob J. Gerwig, 210 East Lexington St., Baltimore, for erection of five dwellings on Saratoga St.; 15x18 feet; two stories; iron-spot brick; Lardwood interior finish; cost \$10,000.

Md., Baltimore.—John J. Watson, 763 Calvert Bldg., is having plans prepared by J. E. Laferty, 11 East Pleasant St., Baltimore, for erection of residence at Mont Alto; stone and frame; two stories; cost \$12,000.

Md., Baltimore.—W. P. Parker is having plans prepared by Joseph E. Maher, 305 Maryland Savings Bank Bldg., Baltimore, for erection of dwelling at Lennox Park; two and one-half stories; ornamental frame; interior finish hardwood and oak; cost \$8000. Among contractors estimating are Central Construction Co., 222 St. Paul St.; H. A. Kelhaugh, 1945 Harlem Ave.; I. O. Hildebrand, 2217 East Preston St., all of Baltimore.

Md., Baltimore.—Frederick E. Tohe, 2403 West North Ave., will erect 38 dwellings on Ruxton Ave. between Westwood Ave. and Pearsbury St.; 15x35 feet; two stories; brick; cost \$75,000.

Md., Baltimore.—Clarence H. Slater, 2240 Guilford Ave., will erect frame dwelling at Roslyn and Piedmont Aves.; among contractors estimating are Provident Realty Co., Garrison and Piedmont Aves.; Boyd & Hoff, 214 North Charles St.; John A. Sheridan, 806 North Carrollton Ave.; G. Walter Tovell, Eutaw and Dolphin Sts., and E. G. Turner, 2010 Harlem Ave., all of Baltimore. (Lately mentioned.)

Md., Forest Park.—Bernard J. Herzog, 1322 North Stricker St., Baltimore, will erect dwelling.

Md., Forest Park.—Harry W. Schwaab, 53 Wilkens Ave., Baltimore, will erect dwelling.

Md., Roland Park.—Emory & Nussear, 415 Professional Bldg., Baltimore, are preparing plans for erection of dwelling; two and one-half stories.

Md., Westernport.—E. J. Noon of Piedmont, W. Va., has plans for erection of brick residence.

Mo., St. Louis.—Lodge Realty Investment Co. will erect five dwellings; two stories; brick; cost \$16,000.

Mo., St. Louis.—Theodore Degenhardt Building & Contracting Co. will erect three brick dwellings on Louisiana Ave.

N. C., Durham.—Bishop John C. Kilgo of Trinity College has plans by Hook & Rogers, Charlotte, N. C., for erection of frame residence on campus.

S. C., Aiken.—A. R. Kuser will erect dwelling; cost \$500; John Laird, Aiken, will probably prepare plans and supervise construction.

S. C., Aiken.—G. Morris, Westchester, N. Y., will make additions and alterations to dwelling; cost \$400; John Laird, Aiken, will probably prepare plans and supervise construction.

S. C., Aiken.—Josef Hofmann will probably engage John Laird, Aiken, to prepare plans and supervise remodeling of two dwellings into one; cost \$400.

N. C., Asheville.—O. C. Hamilton will erect dwelling; concrete block; cost \$900.

Tenn., Lebanon.—John Cowan has plans for erection of residence; cost \$400.

Tenn., Moscow.—Mrs. B. F. Turnley will erect residence.

Tenn., Moscow.—A. B. Pardue will erect residence.

Tenn., Memphis.—E. T. Webber will erect residence at 45 South Wellington St.; brick veneer; cost \$10,000.

Tenn., Nashville.—J. F. Beaty will erect dwelling at 1503 Hawkins St.; brick; veneered; cost \$500.

Tex., Dallas.—J. V. Clark has plans by C. D. Hill & Co., Dallas, for erection of residence in Oak Lawn; brick; cost \$30,000.

Tex., Dallas.—J. E. Lee has plans by C. D. Hill & Co., Dallas, for erection of dwelling in Munger Place; cost \$15,000.

Tex., Timpson.—A. Davis of Clayton, Tex., will erect brick residence.

Va., Clifton Forge.—W. D. Bowles has plans by H. C. Allen, Hot Springs, Va., for dwelling.

Va., Clifton Forge.—A. O. Surber has plans by H. C. Allen, Hot Springs, Va., for dwelling.

Va., Clifton Forge.—W. K. Smith has plans by H. C. Allen, Hot Springs, Va., for dwelling.

Va., Clifton Forge.—W. B. Grove has plans by H. C. Allen, Hot Springs, Va., for dwelling.

Va., Danville.—Henry Roedler has plans by McLaughlin, Pettit & Johnson, Danville and Lynchburg, Va., for dwelling; two stories; shingle roof and sides; cost \$300.

Va., Danville.—A. W. Canter has plans by McLaughlin, Pettit & Johnson, Danville and Lynchburg, Va., for dwelling; two stories and basement; frame; shingle roof; second story to be of shingles; two bath rooms; hot air heat; cost \$500.

GOVERNMENT AND STATE

Tex., Palestine.—Postoffice.—McHenry-Beatty Company, East Liverpool, O., is lowest bidder at \$66,725 to erect United States postoffice; James Knox Taylor, supervising architect, Treasury Department, Washington, D. C. (Recently mentioned.)

HOTELS

Ala., Birmingham.—Hotel Hillman, C. H. Nabb, lessee, plans constructing four additional stories.

Fla., Fort Myers.—Royal Palm Hotel will erect addition; cost \$800.

Ark., Lake Village.—Lake Shore Hotel Co. is name of company recently noted organized to erect hotel; plans being made; contract will be let to lowest bidder; usual rights reserved; building will be two stories; steam heat; electric wiring; cost \$25,000. Address J. B. Simms, secretary.

Fla., Jacksonville.—Arthur Waite has leased Ecker apartments at 22-24 East Duval St. and will convert into hotel.

Fla., Plant City.—Mrs. Bessie Smith will erect brick hotel.

Fla., West Palm Beach.—Joseph Zapp Company, Jacksonville, Fla., will make improvements to Seminole Hotel; 150x150 feet; six bathrooms; structure will contain 75 rooms when finished.

Ga., Macon.—Ethridge & Foor, proprietors Lanier Hotel, have plans for rebuilding entire structure; cost \$115,000. (Previously mentioned as rebuilding portion.)

N. C., Asheville.—J. L. Alexander, proprietor of Battery Park Hotel, will, it is reported, erect annex.

N. C., Wilmington.—Kenna & Stacy, 317 Southern Bldg., represent capitalists who contemplate building \$300,000 seaside summer resort hotel; want to correspond with architects and contractors who will undertake construction within time limit.

Okla., Tulsa.—Tulsa Building Co. will submit plans and specifications September 1 for 10-story hotel recently noted; fireproof construction; 140x150 feet; cost within \$400,000; architect, F. W. Hunt, Springfield, Mo.; contractors desiring to bid may secure plans, etc., on application accompanied by certified check for \$25 to assure return; bids to be accompanied by certified check for \$10,000; successful bidder to furnish bond for \$100,000; rights reserved; bids opened September 20 at office of C. B. Lynch, secretary.

Tenn., Lookout Mountain.—Lookout Hotel Co. (address care of H. S. Olmstead & Sons, Chattanooga, Tenn.) will expend \$100,000 to erect hotel recently described; 50 rooms; small cottages connected by colonnade with hotel proper; plans not complete.

Va., South Hill.—Midwa Realty Corporation will open bids August 30 for erection of proposed hotel and store building; three stories; 70x100 feet; ordinary construction; brick; steam heat; electric lighting; electric passenger elevator; plans by Lee & Deihl, Seaboard Bank Bldg., Norfolk, Va.; separate contracts for heating, plumbing and elevator; architects may be addressed.

MISCELLANEOUS STRUCTURES

Miss., Shubuta.—Commissary.—J. N. Brownlee will erect commissary building for Brownlee Lumber Co.; structure will be one story; 80x90 feet; brick; steam heat; electric lighting; private power plant.

Md., St. Marys City.—Orphanage.—National Slavonic Society, A. S. Ambrose, chairman of committee, New York city, will purchase 1000 acres land on St. Marys Bay as site for orphanage and to develop by agriculture; plans to cut timber now on land.

Mo., Marshall.—Dr. D. F. Manning is interested in erection of hospital.

N. C., Greensboro.—Sanitarium.—R. B. Williams is having plans prepared for sanitarium.

Okla., Oklahoma City.—Oklahoma City Pennsylvania Society will erect \$16,000 clubhouse at Belle Isle.

S. C., Aiken.—Stables, etc.—John Hitchcock has plans prepared by John Laird for stables and barn in connection with development of experimental farm; buildings to be 300x100 feet; to form three sides of square. (See "Land Developments.")

Tex., San Antonio.—Sanitarium.—Dr. Harvey M. Matthews will rebuild sanitarium at 300 Day Ave., recently reported burned.

Va., Danville.—Hospital.—General Hospital has plans by McLaughlin, Pettit & Johnson, Danville and Lynchburg, Va., for remodeling hospital; repairs include addition of two stories and raising present building one story.

RAILWAY STATIONS

Md., Port Deposit.—Pennsylvania Railroad, Alex. C. Shand, chief engineer, Philadelphia, Pa., has prepared plans for depot; granite and concrete; connect with old freight depot by covered passageway; cost \$15,000 to \$20,000.

N. C., Shelby.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., will, it is reported, erect passenger station.

Okla., Lawton.—Chicago, Rock Island & Pacific Railway, J. B. Berry, chief engineer, Chicago, Ill., is reported as having plans prepared for \$50,000 depot.

Tex., Canyon.—Gulf, Colorado & Santa Fe Railway, F. Merritt, chief engineer, Galveston, Tex., will, it is reported, remodel freight and passenger station for use as passenger depot at estimated cost of \$8700.

SCHOOLS

Ga., Adairsville.—Cherokee Baptist High School has plans by Huntington & Sears, James Bldg., Chattanooga, Tenn., for dormitory; two stories and basement; cost \$5500.

Ga., Cordele.—City will vote September 23 on issuance of \$10,000 bonds for erecting addition to O'Neal high school. Address The Mayor.

Ga., Collins.—J. B. Kennedy, Mayor, will receive bids until September 20 for erection of school; two stories; brick; plans and specifications on file at office of Mayor. (City lately noted as voting on issuance of \$10,000 bonds.)

Ga., Eastman.—City has voted issuance of \$50,000 bonds for improvements to schools and

installation of sewerage system. Address The Mayor.

Ky., Guthrie.—Guthrie Graded School District voted June 7 on \$8000 bond issue for purchase of school and apparatus for building; W. C. Balee, secretary school district.

La., Atlanta.—J. J. Mixon, Superintendent of Education, Winnfield, La., will receive bids until August 30 for erection of school for Winn Parish School Board at Atlanta; brick; plans and specifications on file at office of superintendent, or William Drago, 715 Hennen Bldg., New Orleans, La.; certified check, \$200.

La., Kelly.—Parish School Board, G. T. McSweeney, superintendent, will erect school in Ward 3.

La., Labadieville.—Assumption Parish Police Jury, S. A. Allemen, school treasurer, Napoleonville, La., will open bids early next year for erection of school building recently noted; cost \$10,000.

La., Slidell.—City will issue bonds for schools and water-works. Address The Mayor.

N. C., Penland.—Appalachian Industrial School, Wesley B. Connolly, secretary, has plans by W. H. Lord, Asheville, N. C., for building recently noted; two stories; 54x102 feet; 17 rooms; concrete and brick foundation; wood construction; storm sheathed; poplar siding; metal-shingle roof; hot-air or steam heat; electric lighting; cost \$4000; construction under supervision of Mr. Connolly; other buildings will not be erected for one year.

Okla., Calumet.—City has voted issuance of \$50,000 bonds for schools. Address The Mayor.

Okla., Enid.—Feeble-Minded Institute, J. Y. Callahan and Edmund Frantz, board of control, has plans by A. A. Crowell, Enid, for erection of \$25,000 school.

Tenn., Covington.—City has plans by R. H. Hunt, James Bldg., Chattanooga, Tenn., for proposed school building; two stories; brick; stone trimmings; metal roof; cost \$13,000.

Tenn., Jersey (not a postoffice).—Hamilton County Industrial School Trustees will receive bids until September 1 for erection of school dormitory; plans and specifications on file at office of Charles E. Bearden, Chamberlain Bldg., Chattanooga, Tenn.; certified check for \$200.

Tex., College Station.—R. T. Milner, president Agricultural and Mechanical College, will receive bids until September 5 for erection of two reinforced-concrete and brick dormitories; plans and specifications on file after August 23 at office of F. E. Giesecke, college architect. (Lately mentioned.)

Tex., Port O'Connor.—City will erect \$5000 school. Address The Mayor.

Tex., Seadrift.—City will erect \$3000 school. Address The Mayor.

Va., Wytheville.—G. R. Huffard, division superintendent of Evensham School Board, will receive bids until September 1 for erection of school; plans and specifications on file at his office.

STORES

Ala., Florence.—Frank Perry will erect double store building.

Ala., Florence.—Frank M. Perry will expend about \$15,000 to erect store building recently noted; two stories and basement; 44x150 feet; ordinary construction; brick; metal roof; probably install \$2500 hand-lift elevator; plans and construction by owner.

Ala., Hartselle.—A. Polytinsky will erect brick store; A. J. Norwood, lessee.

Ala., Hartselle.—J. B. Orr will erect two stores on Main St.; one story; 100x80 feet; brick; Williams & Gilliland, lessees.

Ark., Little Rock.—Dr. French and Charles L. Thompson will erect store; two stories; brick; cost \$20,000.

Fla., White Springs.—R. A. Barnett will let contract at once for erection of proposed store building; 26x75 feet; brick; plate-glass front; metal roof.

Miss., De Kalb.—Dr. S. D. Steunis will, it is reported, erect store building to cost \$2000.

Miss., Lauderdale.—Rosenbaum & Little will, it is reported, erect two-story store building to cost \$4000.

Mo., St. Louis.—Benjamin Franklin Real Estate Co. will erect store building at 517-529 Morgan St.; cost \$50,000.

Mo., St. Louis.—Union-Easton Realty & Building Co. will erect store and theater. (See "Theaters.")

Mo., St. Louis.—Union-Easton Realty & Building Co. will erect theater and store building at Easton Ave. and Union Blvd.; three stories; 100x115 feet.

N. C., Chapel Hill.—C. L. Lindsay will erect two brick stores.

Okla., Tuttle.—W. F. Foster and Dexter Kramer will rebuild store buildings recently burned; 25x100 feet; one story; fireproof construction; incandescent lights; cost \$3200 each.

Tex., Dallas.—Mr. Easterwood of Wills Point, Tex.; Mr. Fielder of Sherman, Tex., and Charles F. Bolanz of Dallas will erect store northwest corner Pearl and Commerce Sts.; three stories and basement; brick; mill construction; cost \$25,000; William T. Fulton & Co., lessees.

Tex., El Paso.—J. Callisher Dry Goods Co. is having plans prepared by H. C. Frost, El Paso, for erection of store; steel and concrete; five stories, with basement and sub-basement.

Tex., Marlin.—L. N. Stanley will erect store on Live Oak St.; one story; brick; cement floors.

Tex., Marlin.—Paul Scheiblich will erect store.

Tex., Victoria.—Ben Dreyfus will receive bids until September 1 for erection of store; one story and basement; brick; 50x100 feet; plans and specifications on file at office of U. Leftland, 118 North Main St., Victoria.

Va., South Hill.—Midwa Realty Corporation will open bids August 30 for erection of proposed store and hotel building; 70x100 feet. (See "Hotels.")

Va., Norfolk.—Richardson Construction Co., Norfolk, is lowest bidder at \$75,436 for construction of proposed Fergus Reid Bldg., corner Freemason and Granby Sts.; two stories, with foundation capable of supporting 12 stories; 119x96 feet; polished granite base; walls, Indiana limestone; fireproof; steel frame and skeleton.

Va., Portsmouth.—Mr. Steinman has plans by Edward Overman, Portsmouth, for erection of store; 40x80 feet; two stories; ordinary construction; brick and frame; gas and electric lighting; dumbwaiters; cost \$7000.

W. Va., Wheeling.—I. A. Garce will rebuild burned store; loss was \$4500.

THEATERS

Tex., Port Arthur.—Captain Tyrrell of Beaumont, Tex., will erect theater; 75x140 feet; two stories; brick.

Tex., San Angelo.—Merchant & McConnell will rebuild burned theater; cost \$35,000.

WAREHOUSES

Ga., Reynolds.—Farmers' Warehouse & Fertilizer Co., W. M. Musselwhite, president, will erect 75x200-foot cotton warehouse and 75x100-foot fertilizer plant; cost \$6000. (See "Fertilizer Plants.")

Ky., Louisville.—Standard Sanitary Manufacturing Co. will erect concrete warehouse.

Md., Baltimore.—William Heyser, Pratt and Grant Sts., purchased site with frontage of 46 feet on Grant St. on which to erect warehouse.

Mo., Kansas City.—Patterson-Sargent Paint Co. will erect warehouse; brick and concrete; 50x127 feet; four stories; cost \$38,000.

Mo., St. Louis.—Waters-Pierce Oil Co. will erect warehouse to cost \$30,000.

S. C., Brunson.—Brunson Cotton Warehouse Co. incorporated with \$5000 capital stock by W. D. Barnes, S. A. Agnew and G. L. Preacher.

Tex., Houston.—American Brewing Co. will have plans prepared by Cooke & Son of Houston for fireproof warehouse.

N. C., Walnut Cove.—Stokes County Union Warehouse Co. incorporated with \$100,000 capital stock by C. W. Gildewell and others.

Tex., Wills Point.—Farmers' Union Warehouse Co. incorporated with \$5200 capital stock by W. H. Taylor, L. M. Teel and W. A. Bott.

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Fla., Ocala.—Miss Jefferson Bell, Tallahassee, Fla., awarded contract to Melver & MacKay, Ocala, for erection of apartment-house recently noted; 14 rooms; two apartments; frame; cost \$6500; plans by George MacKay, Ocala.

Md., Baltimore.—New Era Realty Co., 3440 Highland Ave., awarded contract to Israel Silberstein, 818 Equitable Bldg., Baltimore, for erection of proposed apartment house at Brookfield Ave. and Whitelock St.; 75x89 feet; four-story; pressed brick and stone; marble trimmings; interior finish hardwood, oak and mahogany; fireproof; electric lights; hot water heating; cost about \$90,000.

600; plans by Louis Levi, 610 American Bldg., Baltimore.

Md., Baltimore.—Arthur B. Bibbins, curator Goucher College, 2600 Maryland Ave., has purchased dwellings 100-2-4-6 West 26th St. and will convert into apartment-houses; contract awarded to L. J. Brown.

BANK AND OFFICE BUILDINGS

Ark., Marked Tree.—E. Ritter awarded contract to William Fells (address, care of Mr. Ritter) for office and store building. (See "Stores.")

D. C., Washington.—F. W. Clements, 1460 Irving St. N. W., awarded contract to Geo. C. Hough, 1317 H St. N. W., Washington, to remodel residence at 735 13th St. N. W.; first floor to be converted into storeroom and upper three floors into offices; new front practically of plate glass, and steam heat included in improvements; plans by Spelden & Spelden, 1403 New York Ave. N. W., Washington.

N. C., Winston-Salem.—J. E. and C. E. Bennett will erect building; 71x48 feet; brick and stone; composition roof; gas and electric lighting; ground floor, having floor space of 4200 feet, will be used by Southern Express Co.; two upper floors for semi-boarded hotel, containing 30 rooms, three bathrooms, offices, etc.; R. S. Brown has contract for brick work and W. W. Liven good for carpentry, both of Winston-Salem. (Recently mentioned.)

S. C., Pageland.—Bank of Pageland awarded contract to J. M. Carpenter, Pageland, for erection of bank building recently noted; 36x60 feet; fireproof construction; cost \$6000.

Tex., Louise.—H. P. Stockton awarded contract to Chas. Suske (address, care of Mr. Stockton) for erection of bank and store building recently described; bank 25x50 feet; store 25x50 feet; fireproof construction. (See "Machinery Wanted.")

CHURCHES

D. C., Washington.—St. Matthew's Catholic Church, Mgr. Thomas S. Lee, rector, 1739 Rhode Island Ave. N. W., awarded contract to Penneck Bros., Philadelphia, Pa., to complete edifice on Rhode Island Ave. between 17th St. and Connecticut Ave., and erect three-story-and-basement rectory east of church building, facing Rhode Island Ave.; contract calls for construction of dome, nave of chapel, sacristy and chapels of Sacred Heart and Blessed Virgin; when completed edifice will have frontage of 168 feet, with courts on west and in rear; exterior of stone and brick; interior finished in marble and hardwood; white marble altar 12 feet long, 4 feet wide and 3 feet high; contract price is \$175,000, exclusive of carving and decorating; plans by La Farge & Morris of New York.

Md., Baltimore.—Church of Prince of Peace, Rev. Henry T. Sharp, pastor, 2815 Walbrook Ave., awarded contract to C. C. Watts, 113 West Hamilton St., Baltimore, to erect edifice at 10th St. and Walbrook Ave., Walbrook; structure will be 43x100 feet; contract price, \$40,000; plans by A. C. Leach, 323 North Charles St., Baltimore. (Previously mentioned.)

Tex., Tyler.—Jewish orthodox congregation awarded contract for erection of synagogue; frame; cost \$3000. Address The Rabbi, Jewish Orthodox Congregation.

Va., Danville.—First Presbyterian Church awarded contract at \$48,000 to R. H. Richardson & Son, Danville, for erection of proposed edifice; heating and ventilating contract awarded at \$2800 to American Machine & Manufacturing Co., Charlotte, N. C.; plans by R. H. Hunt, James Bldg., Chattanooga, Tenn.

Tex., Bay City.—Episcopal Church awarded contract to Mr. Hatchett of Bay City to erect edifice; 24x85 feet; brick; metal roof and ceiling; estimated cost, \$6000, exclusive of furnishings.

Tex., Richmond.—Calvary Episcopal Church awarded contract to R. B. Chauncey of Richmond to remodel edifice.

CITY AND COUNTY

Ala., Centerville.—Jail.—Bibb County Commissioners awarded contract to F. M. Dobson & Co., Montgomery, Ala., for erection of jail. (Lately mentioned.)

Ala., Centerville.—Bibb County Commissioners will expend \$30,000 to erect jail; 46x80 feet; fireproof and ordinary construction; direct steam heat; approved conduit system of lighting; dumbwaiter encased in steel shaft; plans by F. M. Dobson & Co., Montgomery, Ala.; contract recently noted awarded to Dobson & McKinnon, Montgomery and Geneva, Ala.; cell work furnished by Die

bold Safe & Lock Co., Canton, O. (See "Machinery Wanted.")

Mo., Kansas City.—Holdover.—City awarded contract for holdover as follows: To Alexander Kinghorn, at \$14,000, for general work; A. McKinley & Co., at \$4989, for pumping equipment; Otis Elevator Co., at \$3513, for installing elevator; Lewis & Kitchen, at \$3485, for heating and ventilating system. (Lately mentioned.)

Tenn., Memphis.—Engine-house.—City will expend \$25,000 to erect engine-house; two stories; 45x100 feet; ordinary construction; plans by Shaw & Pfeil, Memphis; contract recently noted awarded to Edward Abele, Memphis.

Tex., San Antonio.—Fire Station.—City awarded contract for erection of two fire stations; at \$2796 to H. C. Jones, San Antonio, for erection of South Presa St. station; at \$4140 to J. B. Sammons, San Antonio, for erection of Prospect Hill station. (Lately mentioned.)

Va., Alexandria.—Jail.—County Supervisors awarded contract to B. F. Smith Construction Co., Washington, D. C., for remodeling jail; cost \$5975; plans by B. F. Smith, Washington, D. C. (Previously noted.)

Va., Emporia.—Jail.—Greenville County Commissioners awarded contract to B. F. Smith Fireproof Construction Co., 817 14th St. N. W., Washington, D. C., for erection of jail; two stories; concrete foundation and ceilings; cost \$5300. (Lately mentioned.)

COURTHOUSES

Ga., Hawkinsville.—Pulaski county awarded contract at \$11,266 to J. H. Hargrove of Eastman, Ga., for improvements to courthouse; install heating plant, etc. (Lately mentioned.)

Tex., Fort Davis.—Jeff Davis County Commissioners awarded contract at \$47,000 to Fall City Construction Co., Louisville, Ky., for construction of courthouse and jail; 33 feet 6 inches by 36 feet; fireproof construction; plans by L. L. Thurmond & Co., Dallas, Tex. (Lately mentioned.)

DWELLINGS

Ark., Rogers.—W. C. Roberts awarded contract to A. O. Clarke of Little Rock, Ark., for \$4000 improvements to residence at 5th and Walnut Sts.

D. C., Washington.—St. Matthews' Catholic Church, Mgr. Thomas S. Lee, rector, 1739 Rhode Island Ave. N. W., awarded contract to Penneck Bros., Philadelphia, Pa., for erection of church and rectory on Rhode Island Ave.; plans by La Farge & Morris, New York. (See "Churches.")

Ga., Augusta.—Trustees of Reid Memorial Church on the Hill awarded contract to Blue Ridge Construction Co. of Augusta for erection of three cottages; plans by H. E. Wendell, Augusta; cost \$14,000.

Ga., Savannah.—Capt. Geo. P. Walker awarded contract to P. Rabey for erection of dwelling; monolithic concrete construction; two-story verandah, 14 feet wide, of red promenade tile; red terra-cotta tile roof; interior cabinet-finished mahogany and quartered oak; dining-room wainscoted, nine feet, with solid mahogany panels and columns; three bathrooms; tiled floor and walls; electric elevator; hot-water heating; plans by H. W. Witcover, Savannah.

Md., Frederick.—Harry G. Tritape awarded contract for erection of residence; white cement blocks.

Md., Mt. Washington.—Mrs. Sara Tinsley awarded contract to Mt. Washington Development Co., 508 Maryland Telephone Bldg., Baltimore, for erection of residence at Broad Hills; plans by Henry J. Tinley, 314 North Charles St.

Mo., St. Louis.—J. D. Fidler has plans by and awarded contract to Hogg & Reid, 614 Victoria Bldg., St. Louis, for erection of dwelling recently noted; eight rooms; ordinary construction; hot-water heat; cost \$4300.

Oklahoma City.—C. B. Ames awarded contract to Oklahoma Construction Co., Oklahoma City, for erection of dwelling and garage at 14th St. and Hudson Ave.; two stories, with attic and basement; white Missouri limestone; hardwood interior finish; colonial porch; fireproof; steam-heating plant; system of ventilation; attic will contain ballroom; cost \$60,000; plans by Layton, Smith & Hawk, Oklahoma City. (Lately mentioned.)

S. C., Anderson.—W. N. Thompson will erect dwelling at River and Cochran Sts.; two stories; brick veneer and stucco; cost \$4500; J. L. Hembree, Anderson, contractor.

Tenn., Chattanooga.—Judge McReynolds will expend \$6500 to erect dwelling; nine

rooms; stucco; plans by Huntington & Sears, Chattanooga; contract recently noted awarded to G. A. Bender, Chattanooga.

Tex., Denison.—J. L. Short has plans by and awarded contract to James Shields, Denison, for erection of dwelling recently noted; 10 rooms; frame; hot-air heat; electric lighting; cost \$4000.

Tex., Houston.—Geo. Meyer awarded contract to Joyce Hughes Construction Co., Houston, for erection of residence in Havendale; cost \$7000; plans by Cooke & Son, Houston.

Tex., Timpson.—Berry Shipp awarded contract for erection of residence.

W. Va., Wheeling.—Arch A. Taylor awarded contract to J. W. Beltz Company, Wheeling, for erection of brick residence at 827 Market St.; cost \$4500.

GOVERNMENT AND STATE

Ga., Rome.—Postoffice.—Government awarded contract to D. J. Phipps, Newport News, Va., to erect addition to United States postoffice; ordinary construction; material and architecture to conform with present structure; extend 23 feet westward; dome; lobby to be enlarged and retiled; revolving doors; cost, without mechanical equipment, \$38,766; cost of heating plant \$3800; cost of lighting plant \$1380; James Knox Taylor, supervising architect, Treasury Department, Washington, D. C. (Previously mentioned.)

Okl., Enid.—Government awarded contract to Tom Lovell & Sons, Denton, Tex., at \$26,443 to erect U. S. postoffice and courthouse. (Previously mentioned.)

HOTELS

Fla., Belleaire.—Bellevue Hotel Co. awarded contract for erection of proposed addition; plans by F. J. Kennard, Tampa, Fla.; cost \$60,000; construction begun.

La., New Orleans.—Theodore Grunewald, proprietor Grunewald Hotel, will remodel and improve hotel; install passenger elevator, ice plant, etc.; contracts awarded.

Tenn., Bristol.—Bristol (Virginia) Hotel Corporation awarded contract to Smith & Wilson, Bristol, for completion of Hotel Bristol; plans by W. T. Dowling, Atlanta, Ga.; structure will be five stories; 150x50 feet; mill construction; cost \$50,000. (See "Machinery Wanted.")

MISCELLANEOUS STRUCTURES

Ga., Hawkinsville.—Stable.—Atlanta Realty Owners Co. awarded contract to W. J. Z. Reatty of Hawkinsville to erect stable.

Md., Baltimore.—Hamden-Woodberry Neighborhood Association, Mrs. Donald Hooker, president, 912 West 36th St. North, awarded contract to Frederick Decker & Son, 1209 East Biddle St., Baltimore, to erect clubhouse on 3d St. near Falls Rd.; structure will be two stories and basement, 44x70 feet, of pressed brick with stone trimmings; will contain gymnasium 38x70 feet, and auditorium with seating capacity of 300; estimated cost, \$30,000; plans by Wyatt & Nolting, Keyser Bldg., Baltimore. (Recently mentioned.)

Mo., St. Louis.—Gymnasium, etc.—Tower Grove Turnverein, Grand Ave. and Junata St., awarded contract to Kellerman Contracting Co., St. Louis, for erection of gymnasium, natatorium, entertainment hall and stores; three stories; 112x117 feet; fireproof construction; hot-water heat; electric lighting; dumbwaiters; cost \$80,000; plans by Wm. A. Lucas, Odd Fellows' Bldg., St. Louis.

Tenn., Knoxville.—Exposition Building.—E. C. Mahan, chairman of committee representing Southern Appalachian Coal Operators' Association, awarded contract for erection of coal building on exposition grounds; structure of coal and consist of two rooms and hall; structure will be 20x50 feet; cost \$1250; plans by George T. Barber & Co., Knoxville; contract awarded to Reliance Building Co., Knoxville.

Tex., San Angelo.—Bathhouse.—Manshaw & Dalton of San Angelo have contract to erect bathhouse; stone; cost \$10,000.

Tex., Waco.—Clubhouse.—West End Club, R. T. Bolters, president, will expend \$18,000 to erect clubhouse; 149x128 feet; two stories and basement; frame; red wood and stucco siding; plans by Roy E. Lane, Waco; contract recently noted awarded to P. A. Harris & Son, Waco.

RAILWAY STATIONS

Va., Hartsville.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., awarded contract, it is reported, to Mr. Chaney, Pee Dee, N. C., to erect depot.

SCHOOLS

Ala., Gadsden.—Board of Education awarded contract to T. F. Marlow, Gadsden, for erection of school; cost \$30,000.

Ark., Conway.—State Normal Board awarded contract at \$33,130 to T. T. Riddick, Fort Smith, Ark., for construction of basement and first story of girls' dormitory; estimated cost of complete construction and equipping, \$50,000. (Lately mentioned.)

Ark., Jonesboro.—Trustees of Agricultural School awarded contract at \$30,000 to Munk & Ritchey of Pine Bluff, Ark., for erection of main school building; three stories and basement; 143x74 feet; brick; contract will be awarded September 15 for construction of dormitory buildings.

La., Gretna.—Jefferson Parish School Board awarded contract at \$26,000 for erection of school; plans by Stevens & Nelson Company, 1109 Hennen Bldg., New Orleans, La.; ordinary construction; steam heat; electric lighting; contract awarded to R. McCarthy. (Address care of architects. Lately mentioned.)

La., St. Martinsville.—School Board will expend \$18,350 to erect school building; 80x80 feet; two stories and basement; ordinary construction; brick; electric lighting; plans by Favrot & Livaudais, New Orleans, La.; contract recently noted awarded to Caldwell Bros., Abbeville, La.; heating and plumbing contracts not yet let; J. C. Broussard may be addressed.

Miss., Columbus.—Industrial Institute & College will expend \$10,000 to complete gymnasium and library building; ordinary construction; steam heating; electric wiring; plans by J. P. Stausel, Columbus; contract recently noted awarded to McClanahan & Terry, Columbus.

N. C., Black Mountain.—Buncombe County Commissioners awarded contract at \$3620 to W. C. Craig, Asheville, N. C., for erection of school.

Tenn., Raleigh.—Hollinsworth & Co., Memphis, have contract for erection of school; cost \$19,000. (Lately mentioned.)

Tex., Colorado.—School Board has accepted bids of Heermans & Crawford, Jacksonville, Tex., for erection of high-school building recently noted; two stories; brick; stone trimmings; cost \$18,000.

Tex., Blessing.—Blessing School District Commissioners awarded contract to Shearer & Goyer, Houston, Tex., for erection of school; brick; cost \$11,000. (Lately mentioned.)

Tex., Houston.—City will expend \$30,000 to erect school building recently noted; 28x36 feet; two stories; eight rooms; brick; electric lighting; heating contract let separately; contract for building awarded to W. E. Woodruff, 222 First National Bank Bldg., Houston.

Tex., Mart.—Mart School Board awarded contract to T. A. Lindsey, Commerce, Tex., for erection of school recently noted; three stories; 70x143 feet; ordinary construction; direct steam heat; cost \$3800; plans by W. Drago, New Orleans, La. (See "Machinery Wanted.")

STORES

Ala., Haleyville.—John Haley has awarded contract for erection of store and office building; 40x60 feet; two stories.

Ark., Marked Tree.—E. Ritter awarded contract to William Fells (address, care of Mr. Ritter) for store and office building recently noted; 60x70 feet; brick; cost \$7000.

Ark., Texarkana.—J. H. Kress Company of New York, L. B. Mosher, local manager, awarded contract to Ledbetter & Mundi, Austin, Tex., for erection of store at 116 West Broad St.; two stories and basement; plate-glass counter, showcases, etc.; cost of equipment \$12,000; cost of building \$25,000; J. W. Mack, supervising architect.

D. C., Washington.—F. W. Clements, 1460 Irving St. N. W., has awarded contract to George C. Hough, 1317 H St. N. W., Washington, for remodeling building at 735 13th St. N. W. into store; plans by Spelden & Spelden, 1403 New York Ave. N. W., Washington.

Mo., St. Louis.—Tower Grove Turnverein awarded contract to Kellerman Contracting Co., Roe Bldg., St. Louis, for erection of store, gymnasium, natatorium and entertainment hall; cost \$80,000. (See "Miscellaneous Structures.")

Tex., Amarillo.—Green Bros., 609 Polk St., awarded contract to Cooper & Easton for erection of store; two stories; brick; 35x30 feet; cost \$30,000.

Tex., Gainesville.—Owen Saunders, J. C. Whaley and associates awarded contract to Garrett & Collins, Gainesville, for erection

of store; 125x200 feet; steel ceiling; concrete floors; plate-glass front; cost \$25,000; William Killgore Company has leased building.

Tex., Louise.—H. P. Stockton awarded contract to Chas. Suske (address, care of Mr. Stockton) for erection of store and bank building. (See "Bank and Office Buildings.")

Tex., Liberty Hill.—John Davis awarded contract to Ed Faubin, Liberty Hill, for erection of store building for W. M. Vaught & Son, recently noted; 60x30 feet; fireproof construction; cost \$2500; plans by J. N. Pullington, Liberty Hill.

Tex., Seguin.—Alfred Eickenroht awarded contract to John W. Goodman for erection of store; cost \$6000.

Tex., Wharton.—R. B. Houston awarded contract for erection of two-story brick store.

Va., Norfolk.—C. W. Fentress awarded contract at \$18,858 to Jesse Johnson of Norfolk for erection of store; four stories; 100x250 feet; steel and concrete; steam heat; gas and electric lights; electric freight and passenger elevators; plans by John K. Peebles of Norfolk. (Previously mentioned.)

Va., Richmond.—Mrs. A. J. Pyle, 315 North 5th St., awarded contract to Aubrey Hunt, Floyd Ave., Richmond, for remodeling dwellings into stores; 35x80 feet; two stories; metal ceilings; brick; marble front and plate glass; hot water heat; electric lighting; cost within \$8000; plans by Carnell & Johnson, 5th St., near Main, Richmond. (Recently noted.)

Va., Orange.—Swan & Carpenter awarded contract to Mr. Hughes, Orange, for erection of store building recently noted; two stories and basement; 68x100 feet; brick; will install elevator; cost \$8000; plans by W. R. Winfield, Charlottesville, Va.

WAREHOUSES

Fla., Pensacola.—Avery Hardware & Supply Co. will expend \$15,000 to erect warehouse recently noted; 87x230 feet; three stories; mill construction; electric elevator; plans by W. D. Willis, Pensacola; contract awarded to C. H. Turner Construction Co., Pensacola.

Md., Baltimore.—Charles Milske, 232 North Chester St., Baltimore, has contract to erect Neubert Bldg. at 113 Hollingsworth St.; brick; two stories; 30x37 feet; interior of mill construction; elevator to cost \$350; cost of building, \$1800.

Tex., Houston.—Seaman estate awarded contract to Lichter & Co., Chicago, Ill., to erect warehouse; floor space of 118x43 feet; six stories and basement; brick; mill construction; estimated cost, \$100,000; plans by Burnham & Co. of Chicago; Gus Wilke will take charge of work for Lichter & Co. (Previously mentioned.)

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Birmingham.—H. W. Stanley, general superintendent of transportation of the Seaboard Air Line, is quoted as saying that the company has set aside \$200,000 for improvements on the Birmingham division, such as filling in trestles, lining tunnels with concrete, erection of steel structures where trestles have to be continued, and other betterments. W. L. Seddon is chief engineer at Portsmouth, Va.

Ala., Gadsden.—Louis Hart, promoter of the Necedah & Northwestern Railway, is reported as saying that Greffencamp & Paulson of Birmingham, Ala., will make survey for the proposed line to the summit of Look-out Mountain.

Ala., Marmill.—A dispatch from Montgomery reports the incorporation at the State capital of the Alabama, Florida & Southern Railroad to build a line 25 miles long from Marmill, Ala., to Malone, Fla.; capital \$10,000.

Ala., Mobile.—John T. Cochrane is quoted as confirming reports that an extension of the Tombigbee Valley Railroad, of which he is president, is being planned for 10 or 12 miles north from Silas, Ala., the present northern terminus. Rights of way and depot grounds are offered. William Toxey is chief engineer at Panama, Ala. Mr. Cochrane's address is Mobile. Mr. Cochrane is also reported investigating a route for the contemplated extension to Birmingham of the Alabama, Tennessee & Northern Railway, of which he is also president, and the two lines may eventually be connected.

Ark., England.—Eagle & Co. It is reported, have been given contract to clear 10 miles of right of way for extension of the Central Arkansas, Cypress & England Railway to Stuttgart, Ark.

Ark., Jonesboro.—Franchise is reported passed and approved for the Interurban railway projected by Preston Hatcher, manager of the Home Telephone Co., and he is quoted as saying that construction preliminaries for the line from Jonesboro to Nettleton, Ark., will begin. A belt line may be built in Jonesboro.

Ark., Prescott.—Prescott & Reader Railway Co. chartered to build from Prescott south-east to Reader, 20 miles; capital \$200,000. Incorporators, George W. Rogers, Z. B. Curll and S. Kahn of Little Rock, Q. L. Harrison of Reader and R. C. Powell of Camden, Ark.

Ark., Magnolia.—The Gulf & Magnolia Northern Railroad Co. has amended its charter, which provided for a line from Magnolia to Hope, Ark., 31 miles, so as to extend from Hope to Horatio, near the Oklahoma State boundary, 55 miles, and from Magnolia to the Louisiana boundary at Junction City, 37 miles. S. Q. Sevier of Camden, Ark., is president, and he is quoted as saying that it is proposed to make a direct line from Oklahoma to the Gulf of Mexico. Connection will be made at Junction City with the Rock Island; at Horatio with the Kansas City Southern. Already 25 miles have been located; headquarters at Hope, Ark.

Ark., Monticello.—Citizens of Monticello are reported to have begun a movement to raise \$300,000 in Monticello and Hamburg, Ark., to build a railroad 33 miles long to connect the towns. The Mayor of Monticello may be able to give information.

Ark., Stuttgart.—Contract is reported awarded to the H. Dailhoff Construction Co. of Little Rock, Ark., to build the Stuttgart & Rice Belt Railroad from Mesa, on the Rock Island Railroad two miles from De Valls Bluff, south to Stuttgart, 22 miles. Contract covers all work. D. A. McCrean of Little Rock is chief engineer. Officers of the railroad are: M. Schuller of St. Louis (industrial commissioner of the Frisco system), president; Geo. C. Lewis of De Valls Bluff, Ark., vice-president; J. W. Underwood, secretary and treasurer. Stuttgart, the directors being George W. Fagan, J. L. Porter, Dr. L. H. Morpheus and W. M. Price, all of Stuttgart. Reported that contract is for \$250,000. Work to be completed by November 29. Reported that the line will be continued further to the Arkansas River.

Ga., Cutbert.—The Georgia, Florida & Alabama Railroad is reported to have completed grading on its extension from Kimbrough to Richland, and will immediately begin track-laying, to be completed by October 1. Reported also that a further extension is proposed from Richland to Manchester or some other point on the Atlanta, Birmingham & Atlantic Railway. C. G. Barney is chief engineer at Bainbridge, Ga.

Ga., Waynesboro.—Survey is reported complete to Waynesboro for the Brinson Railway, and grading will soon begin. A trestle 740 feet long is being erected over McIntosh Creek, near Waynesboro, and another 100 feet long near Sardis. Tracklaying is about to begin from Millhaven to Sardis.

Ky., Ashland.—President William Cotter of the Cincinnati, Hamilton & Dayton Railway, Cincinnati, O., is reported as saying that a bridge will be built over the Ohio River at fronton, O., and that the line will enter the Kentucky coal regions. F. H. Alfred is appointed general superintendent.

Ky., Bowling Green.—The Bowling Green & Northern Railroad Co., according to a dispatch, is incorporated with \$100,000 capital to build a line 15 miles long from Bowling Green northward to a point on the Illinois Central Railroad.

Ky., Louisville.—The extension of the Louisville & Eastern Railway, an electric line, to Shelbyville, about 23 miles, is reported complete and will be immediately put in service.

Ky., Warren.—A letter to the Manufacturers Record says that the Cumberland Railroad Co. has resumed construction, a contract having been let to the Gibson-Carr Construction Co. of Middlesboro, Ky., for the Tye Fork extension of three or four miles; also for the extension of the main line about three miles. The road is projected to reach Jellico, Tenn., but a tunnel through Brush Mountain will have to be built just beyond this extension of the main line. B. C. Milner is general manager and chief engineer at Warren, Ky.

La., Franklin.—The Franklin & Abbeville Railway is reported to have completed and opened for business its extension of 13 miles from New Iberia to Milton, La.

Md., Baltimore.—An officer of the Philadelphia, Baltimore & Washington Railroad Co. says that nothing definite has been decided about the use of the property recently purchased in the northwestern section of Baltimore.

Md., Baltimore.—An officer of the Maryland Electric Railways denies the reports that the company will build a branch from Marley Station to the Magoth River. He says it is without foundation.

Md., Delmar.—A dispatch says that the New York, Philadelphia & Norfolk Railroad will be double-tracked from Delmar to Cape Charles, 55 miles. Elsha Lee is superintendent at Cape Charles City, Va.

Md., Frederick.—Directors of the Frederick Railroad Co. have formally approved the plan to convert the Thurmont division to electric operation, as previously reported proposed. Freight will still be hauled by steam-power. Estimated cost of improvement, \$75,000.

Md., Westernport.—The Eyre-Shoemaker Company of Philadelphia is reported working on a contract for the Baltimore & Ohio Railroad at Everett Tunnel on the 17-mile grade.

Miss., Chicora.—The Robinson Land & Lumber Co. is reported to have built a standard gauge railroad from Chicora to a point east of and not far from Myrick, in Jones county, Mississippi. It is reported considering a suggestion that it be extended to Laurel.

Miss., Hattiesburg.—W. F. S. Tatum, president of the Bonhomie & Southwestern Railroad, is quoted as saying a short extension into Hattiesburg from the city limits is proposed, and if built the line may be further extended to Columbia, Miss., and Baton Rouge, La. The road is now about 18 miles long from a point near Hattiesburg southwest.

Mo., St. Louis.—Valley Park, St. Louis & Eastern Railway Co. chartered in Illinois to build line from East St. Louis; capital \$100,000; incorporators, W. C. Plass, C. Neustadt and H. Schrader of East St. Louis, Ill.

N. C., Rockingham.—H. W. Allport & Co., contractors, are reported to have begun work on construction of the Rockingham Railroad from Roberdel No. 1 (three miles northeast) via Rockingham to Gibson, N. C., 21 miles. Tony & Co. have a subcontract for three miles of grade. J. P. Leak and others interested. (See June 23.)

N. C., Towneek.—The Towneek Railroad & Lumber Co. is reported pushing construction of its railroad towards Southport. It has been completed to Bolivia, about 13 miles from there.

N. C., Whiteville.—An officer of the Whiteville Lumber Co. says that it is not extending the main line of its railroad, but proposes to construct a spur for logging. This denies a recent report.

Okla., Buffalo.—Buffalo & Northern Oklahoma Railroad Co. reported organized with \$100,000 capital to build a line east and west of Buffalo. Eugene Thilleux of Hutchinson, Kans., is to survey from Buffalo east to Avar to connect with the Arkansas Valley & Western. The Frisco system is said to be interested. Directors are E. M. Best, president; O. L. Zook, vice-president; F. C. Platte, secretary; E. C. Johnson, treasurer; Albert Ewers, A. L. Roddy, D. P. Parker, W. H. Temple, C. C. Wyatt, S. W. Hubbard, George Ford, Frank White and J. L. Griffiths of Buffalo and other towns.

Okla., Stillwater.—Oklahoma Public Service & Interurban Lines of Stillwater, Okla., has general offices at 1809 Hudson Terminal Bldg., New York city. Ralph A. Sturgeon is chief engineer and Claude E. Powell, general manager, both at Stillwater, Okla. Line to be built from Stillwater to Sapulpa, 14½ miles, via Guthrie, Morrison and Perkins, through rolling country. Bridges, pile trestle and steel yet undetermined. Part of bids opened, Ian Sweeney & Co. of Oklahoma city and M. B. Ryan & Co. of Shawnee, Okla., are contractors.

S. C., Aiken.—The Augusta & Aiken Railway, it is reported, contemplates building an extension in Aiken. James C. Jackson is vice-president at Augusta, Ga.

S. C., Greenville.—The Greenville & Knoxville Railway is reported to have completed an extension from Cleveland north to River-view.

S. C., Mullins.—The North & South Carolina Railroad is reported completed to Mullins and the first train operated.

Tenn., Harriman.—Survey is reported begun for the proposed Harriman, Knoxville & Eastern Railway.

Tenn., Nashville.—The Tennessee Rapid Transit Co. is reported being organized to build about 125 miles of lines at a cost of from \$3,500,000 to \$4,000,000. The proposed routes are thus: Nashville south to Lewisburg via Nolensville, College Grove, Eagle-

ville and Chapel Hill; Nashville north to Springfield and Clarksville via Ridge Top, Greenbrier and Cedar Hill, and also a branch 12 miles long from Springfield, Tenn., to Adairville, Ky. Incorporation articles will be filed in a few days. Those interested are said to be Robert L. Burch, Richard T. Wilson, Joseph Frank, John M. Gray, Jr., and R. M. Wilson of Nashville, and J. Parkes of Franklin, Tenn. Current is to be purchased from the Nashville Railway & Light Co.

Tenn., Chattanooga.—Newman Erb, president of the Chattanooga Southern Railroad, 42 Broadway, New York city, confirms report that it is contemplated to extend to connect with the Rome & Northern Railroad and also to make a further extension from North Rome, Ga., connecting with or crossing the Seaboard Air Line in the neighborhood of Rockmart, Ga. Details are not yet worked out.

Tenn., Jackson.—Birmingham & Northwestern Railway Co. chartered with \$300,000 capital to build from Jackson to Dyersburg, Tenn., about 45 miles. Directors, R. M. Hall, Dr. J. A. Green and M. W. Ewell of Dyersburg; J. E. Harrell of Crockett county, R. A. Hurt, John L. Wisdom, H. C. Anderson, Samuel T. Tamm, Robert S. Fletcher, Sr., J. C. Feldenthal, I. B. Tigrett, S. H. Neff and Thomas Polk of Jackson. Officers: R. M. Hall, president; John L. Wisdom, vice-president; M. W. Ewell, secretary; I. B. Tigrett, treasurer. John L. Williams is reported appointed chief engineer.

Tex., Asherton.—Asher Richardson, president of the Asherton & Gulf Railroad, is quoted as saying that he will extend the line from Asherton to Eagle Pass, Tex., as reported. Surveys are being made.

Tex., Brownwood.—R. A. Love, president of the Brownwood Southwestern Railway Co., writes that surveys have been practically completed from Brownwood to Rockwood, about 30 miles, and grading contracts will soon be let. He denies the report that W. S. Walker of Granbury, Tex., is interested.

Tex., Cotulla.—The International & Great Northern Railroad, it is reported, contemplates building a branch from Cotulla down the Nueces River Valley. O. H. Crittenden is chief engineer at Palestine, Tex.

Tex., Crystal City.—An officer is quoted as saying that J. E. Franklin and J. H. Byrd, Bank of Commerce Bldg., St. Louis, Mo., are interested in the Crystal City & Gardendale Railroad, of which A. R. Ponder of Crystal City, Tex., is president. (See June 23.)

Tex., Denison.—The Missouri, Kansas & Texas Railway, says a dispatch, has let contract to the Patton-Gibson Company to build extensive yards west of Denison. The same contractor has been double-tracking the road.

Tex., Kingsville.—A. T. Perkins, first vice-president of the St. Louis, Brownsville & Mexico Railway, is quoted in dispatches from San Antonio, Tex., as saying that right of way has been secured from Kingsville to Alice, Tex., about 22 miles, for a branch to connect with San Antonio via the San Antonio & Aransas Pass Railway. But that his company will finally build its own line through to San Antonio. Rails have been bought for the extension to Alice. E. C. Burgess is engineer at Kingsville, Tex.

Tex., Lometa.—The Santa Fe extension from Lometa to Brady is reported to now have 12 miles of track completed from Brady to Eden, and grade between Brady and Lometa is nearly done. M. F. Temple is construction engineer.

Tex., Paris.—Officials of the Paris & Mount Pleasant Railroad are reported as saying that 12 of the 25 miles of line are completed and the rest is graded. It will soon be operated. R. W. Worsham, M. D. McDonald and N. M. Ragland are interested.

Tex., Pleasanton.—George W. Nock of San Antonio, Tex., and Frank Remington of Pleasanton, Tex., are reported promoting plans for a railroad 10 miles long from Poteet, on the Artesian Belt Railway, to Pleasanton, Tex. Estimated cost, \$85,000, of which Pleasanton is reported to have raised \$40,000. A dispatch from Poteet says that grading has begun.

Tex., Spur.—The Wichita Valley Railway, says a report, will build an extension from Spur to Lubbock, Tex., about 69 miles. R. C. Gowdy is chief engineer at Fort Worth, Tex.

Tex., Waco.—An official of the Missouri, Kansas & Texas Railway of Texas, referring to current reports that an extension will be built from Waco eastward, says that he has no intimation from reliable sources that such a move is contemplated.

Tex., Waco.—J. C. Kirby of Rotan, Tex., is quoted as saying that the Texas Central Railroad contemplates extending its line from Rotan to Roswell, N. M., about 270

miles. R. H. Baker is president at Austin, Tex., and C. Hamilton is vice-president and general manager and H. S. McCall resident engineer, both at Waco, Tex.

Tex., Weatherford.—Chicago, Weatherford & Brazos Valley Railroad Co. of Weatherford will build about 35½ miles of standard-gauge line out of Weatherford, which, according to a previous report, will reach Bridgeport, Tex. Officers are: President, R. W. Miller; vice-president, L. M. Kirkes; treasurer, J. W. Pigg; secretary, H. F. Mitchell, all of Weatherford. Seven outfits are reported grading between Weatherford and Peaster, the general contractors being Mitchell, Pigg & Co.

Va., Roanoke.—The Norfolk & Western Railway proposes to issue \$50,000,000 of convertible bonds and \$50,000,000 of new common stock for the conversion of bonds as may be required, in order to continue its improvement policy providing for steady growth of business. Action will be taken by stockholders on October 13. L. E. Johnson is president and C. S. Churchill chief engineer at Roanoke, Va.

W. Va., Caperton.—Walton & Co. are reported to have received contract to build five miles of track, sidings and yards from Caperton, on the Chesapeake & Ohio Railway, to the new Kingston collieries.

W. Va., Clay.—Contract for the Buffalo Creek & Gauley Railroad extension to the head of Buffalo Creek in Nicholas county is reported let. Connection is expected with the Tioza Railroad, which runs from the B. & O. at Allendale. Guy Gray is chief engineer at Clay, W. Va.

W. Va., Elkins.—Reported that the Coal & Coke Railway has decided to build a connection with the Morgantown & Kingwood Railroad and thus to connect with the Pittsburgh & Lake Erie, to which the Western Maryland is building an extension. Henry G. Davis is president and R. H. Pembroke chief engineer, both at Elkins, W. Va. A dispatch from Morgantown says that A. A. Chapman, engineer and right-of-way man, is surveying for the extension from Belington to Point Marion along the Cheat River via Morgantown and Kingwood Junction and Trowbridge.

W. Va., Fairmont.—The Baltimore & Ohio Railroad, says a dispatch, will soon begin an extension of the Paw Paw branch to a new mine of the Virginia & Pittsburgh Company via Rivesville. A. W. Thompson is chief engineer at Baltimore, Md.

W. Va., Tunnelton.—Bennett & Talbott of Greensburg, Pa., says an officer, have secured contract to build the new double-track tunnel for the Baltimore & Ohio Railroad near the old single-track tunnel at Tunnelton. It will be about the same length, seven-eighths of a mile.

STREET RAILWAYS

Ark., Pine Bluff.—J. F. Rutherford, president of the Citizens' Light & Transit Co., is quoted as saying that \$250,000 will be immediately expended for extensions and other improvements.

N. C., Charlotte.—The Charlotte Consolidated Construction Co., it is reported, has applied for franchise to extend its lines a total of about 14 blocks.

N. C., Charlotte.—The Charlotte Rapid Transit Co. of Charlotte is being incorporated by Paul Chatham of Charlotte, Hugh Chatham of Elkin, J. E. Kavanaugh of Winston-Salem and Cameron Morrison of Charlotte, N. C., under the franchise recently granted to Paul Chatham. Capital \$20,000 to \$150,000. Paul Chatham is principal stockholder. Company has right to build lines 30 miles in any direction out of Charlotte.

Okl., Ardmore.—The Ardmore Traction Co. property is reported sold to H. S. Patterson of El Reno, Okla., and George S. Craven of Milton, Iowa, and an extension is contemplated.

Tenn., Chattanooga.—The Chattanooga Railway Co., it is reported, contemplates building an extension of about eight miles from Riverview toward Hixson. W. E. Bolleau is general manager.

Tex., Cleburne.—Blasengame & Miller, it is reported, have been awarded contract for grading the proposed Cleburne street railway, and will begin work soon.

Tex., San Antonio.—Permit has been granted by the City Council for extension of the South Flores St. line of the San Antonio Traction Co. It will be about one and a half miles long into Bexar county.

Tex., San Marcos.—Construction is reported begun on the San Marcos Street Railway. (See August 11.)

W. Va., Wheeling.—Joseph Spidel, Sr., president of the City & Elm Grove Railway,

is reported as saying that a tunnel will be bored through Wheeling Hill from the head of 17th St. to Manchester, saving four miles. J. W. Smith is general manager and chief engineer.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

Air Compressor, etc.—W. F. Paul, R. F. D. No. 8, Box 59, San Antonio, Tex., wants prices on air compressor and boiler.

Automobile Supplies.—C. C. Voyle, Gainesville, Fla., wants prices on automobile supplies.

Asbestos.—See "Heating Plant and Equipment."

Automobile Supplies.—Jackson Garage Co., 341 North Royal St., Jackson, Tenn., wants prices on automobile accessories.

Bathrooms.—M. L. Harrison, Wytheville, Va., wants prices on bathtubs.

Boiler.—See "Mining Equipment."

Boiler.—See "Excelsior Machinery, etc."

Boiler.—See "Air Compressor, etc."

Boilers.—Jackson Veneer Co., S. H. Andrews, president, Jackson, Ala., wants prices on two 80 to 100-horse-power high-pressure boilers.

Bridge Construction.—Bids will be received at office of Register of Deeds for Chowan county, Edenton, N. C., until September 5 for construction of bridge across Rockyhook Creek; length 150 feet; bond of \$500 required. For further information address W. J. Berryman, clerk ex-officio.

Bridge Construction.—Bids will be received at Clerk's office in Warm Springs, Va., until noon September 1 for construction of two steel bridges over Cowpasture River—one at H. L. Page Ford and one at Gale Ford—in Bath county; 178 feet 3 inches; two spans each; plans and specifications on file in office of P. St. J. Wilson, State Highway Commissioner, Richmond, Va., and at Clerk's office in Warm Springs; certified check for \$250 to accompany each bid; further information on application to P. St. J. Wilson.

Bridge Construction.—See "Sewer Construction, etc."

Bridge Construction.—Thilman County Commissioners, Frederick, Okla., will receive bids until noon September 7 for construction of 14 steel bridges; plans and specifications on file in office of John B. Darden, County Clerk.

Bridge Construction.—Sealed bids addressed to P. A. Gorman, Commissioner of S. S. & P. L. Waco, Tex., will be received by City Secretary until September 6 for constructing 54-foot span steel girder bridge and abutments, 22-foot steel I-beam bridge and abutments, 20-foot span reinforced-concrete culvert, 7-foot span reinforced-concrete culvert to plans and specifications on file in City Engineer's office, Waco; bids to be made separately for each structure; certified check for 20 per cent. of each bid. (Date postponed from August 23.)

Building Materials.—Dr. U. R. Bynum, 40 Byrd St., Memphis, Tenn., wants prices on building materials for \$200,000 apartment-house.

Building Materials.—See "Iron, Steel, etc."

Building Materials, etc.—T. A. Lindsey, Commerce, Tex., wants prices on cement plaster, iron, steel, stone, metal ceilings, shingles, concrete barrows and tools.

Building Materials.—S. A. Carpenter, Orange, Va., wants prices on building materials.

Building Materials.—H. P. Stockton, Louise, Tex., wants prices on iron and steel beams for two floors and roof of concrete, windows and doors for front and upper story, fireproof windows and doors for back end, iron for upper portions, with concrete plaster on 9-foot wall and lower portions 11 feet high, and two girders for fronts.

Building Materials.—See "Mineral Wool," "Chain" and "Felt."

Boilers.—See "Mining Equipment, etc."

Boilers.—See "Heating Plant and Equipment."

Burlap.—Denison Mattress Factory, N. Marsico, proprietor, Denison, Tex., wants to correspond with manufacturers of burlap.

Cars.—Joseph E. Bowen, 902 Bank of Commerce Bldg., Norfolk, Va., in market for 10 36 inch-gauge flat cars.

Cars.—Memphis, Dallas & Gulf Railroad Co., Nashville, Ark., wants to lease or buy 15 second-hand standard-gauge dump cars; 10-yard capacity preferred; can use from 6 to 20-yard capacity.

Canning Machinery.—B. Baumgartner, Box 717, Sweetwater, Tex., wants addresses of manufacturers of canning machinery.

Chain.—A. G. Kiser, Tazewell, Va., wants quotations on "Grant" steel-coppered sash chain.

Church Furnishings, etc.—Memorial Methodist Church South, J. E. Stogdz, chairman building committee, Durham, N. C., will require church furnishing, including art glass, seating, etc.; seating capacity for 2000.

Concrete Mixers.—Eastern Railway Supply Co., 413 American Bldg., Baltimore, Md., wants prices on two concrete mixers (Smith), one-half yard capacity.

Concentrating Tables.—See "Mining Equipment."

Conduit System.—See "Lighting Plant."

Dam Work.—U. S. Engineer Office, Wheeling, W. Va. Sealed proposals for constructing lock and guide walls, bear-trap weirs and Chanoine weir for dam No. 19, Ohio River, will be received at this office until 11 A. M. September 16 and then publicly opened; information on application; F. W. Altstaetter, Captain, Engineers.

Dike Construction.—U. S. Engineer Office, Savannah, Ga. Proposals for building shore-protection dikes in Savannah River near Augusta, Ga., will be received until 12 M. September 8; information on application; Dan C. Kingman, Colonel, Corps of Engineers.

Doors, etc.—M. L. Harrison, Wytheville, Va., wants prices on veneered doors and windows.

Drainage.—See "Grading, etc."

Dredging.—United States Engineer Office, Galveston, Tex. Proposals for dredging Texas city channel, Texas, will be received until noon September 19; information on application on; G. P. Howell, Major, Engineers.

Dredging.—U. S. Engineer Office, H. Jervy, Major, Engineers, Mobile, Ala., will receive sealed proposals until September 23 for dredging in Mobile harbor.

Dredging.—Engineer Office, U. S. Army, Room 2 Custom-house, Norfolk, Va. Proposals for dredging channel to Newport News, Va., will be received until noon September 20; information on application; Mason M. Patrick, Lieutenant-Colonel, Engineers.

Dredging.—U. S. Engineer office, Room 309 Custom-house, Baltimore, Md. Proposals for dredging in Southwest Baltimore Harbor and Curtis Bay Channel, Maryland, will be received until 1 P. M. September 20; information on application; Thos. L. Casey, Colonel, Engineers.

Dredging.—Bids will be received at U. S. Engineer Office, Montgomery, Ala., until 1 P. M. September 16 for dredging at entrance to St. Andrews Bay, Florida, and until same date for dredging channel from Apalachicola River to St. Andrews Bay, Florida; information on application; H. B. Ferguson, Captain, Engineers.

Dredging.—Engineer Office, U. S. Army, Room 2 Custom-house, Norfolk, Va. Proposals for dredging Thimble Shoal will be received until noon September 19; information on application; appropriation \$235,000; Mason M. Patrick, Lieutenant-Colonel, Engineers.

Elastic Webbing.—John Cummins, Stoyer, Md., wants addresses of manufacturers of and dealers in elastic webbing for suspenders, etc.

Electrical Equipment.—M. L. Harrison, Wytheville, Va., wants prices on electrical supplies for \$10,000 dwelling.

Electric-Light Plant.—City of Thibodaux, La., will open bids September 23 for installation of electric-light plant; cost of building \$4000; cost of machinery \$25,000; R. J. Maquin, Clerk.

Electrical Machinery.—See "Mining Equipment, etc."

Electrical Machinery.—Phenix-Jellico Coal Co., John S. Crugar, manager, East Bernstadt, Ky., will open bids August 30 for installation of electric plant; multipolar, six-

pole, 550 R. P. M., 150 kilowatts, 270 volts, 550 amperes, two direct-connected dynamos, simple engine and dynamo.

Electrical Machinery.—Joaquin Herm, Barcelona, Spain, wants to represent American manufacturers of electro-therapeutic apparatus, X-ray equipments, electrolysis outfits, electroplating equipments, etc.

Electrical Machinery.—Greensboro Supply Co., Greensboro, N. C., wants prices on 150-kilowatt, 100 per cent. power factor, 3-phase, 60 cycles, 600 volts, 900 R. P. M. alternator, with exciter; two 35-horse-power motors, 550 volts, 3-phase, 60 cycles; 30-horse-power motor, 550 volts, 3-phase, 60 cycles; two 150-kilowatt alternators, 230 volts, 2 or 3-phase, together with motors to suit as follows: three 50 horse-power, two 40 horse-power, three 25 horse-power or three units of 100 horse power each; 150-kilowatt alternator (revolving field type), 2-phase, 60 cycles, 230 volts; give full particulars and lowest cash price.

Electric-light Plant.—See "Water-works, etc."

Electrical Machinery.—See "Water-wheels."

Electrical Supplies.—Office of Commissioners of District of Columbia, Washington, D. C. Sealed proposals will be received at this office until 2 P. M. August 29 for equipping with electrical apparatus, switchboards, wiring, piping and carpenter work in physics laboratory of Business High School, Rhode Island Ave., between 8th and 9th Sts. N. W., Washington, D. C.; form of proposal, specifications and necessary information may be obtained upon application to property clerk District of Columbia, Room 230 District Bldg.; John A. Johnston, E. M. Markham (acting), Commissioners District of Columbia.

Electrical Supplies.—C. C. Voyle, Gainesville, Fla., wants prices on electrical supplies.

Electrical Equipment.—Jackson Veneer Co., S. H. Andrews, president, Jackson, Ala., wants prices on one 50-light dynamo.

Electrical Machinery.—See "Railway Construction and Equipment."

Electrical Machinery.—Davis, Robinson & Co., Roanoke, Va., want 25, 35 or 40-horse-power induction motor, three-phase, 60 cycles, 230 volts, standard make, latest type.

Electrical Machinery.—Proposals will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 10 A. M. August 30 to furnish at Navy-yard, Charleston, S. C., turbo-generating set. Application for proposals should refer to Schedule 2815. Blank proposals furnished upon application to Navy Pay Office, Charleston, S. C., or to bureau; T. J. Cowie, Pay master-General, U. S. N.

Elevators.—Davis, Robinson & Co., Roanoke, Va., want one belt-power freight elevator; capacity, 100 to 1500 pounds.

Engine.—Jackson Veneer Co., S. H. Andrews, Jackson, Ala., wants prices on one 80 to 100-horse-power engine.

Engine.—See "Mining Equipment."

Engine.—Phenix-Jellico Coal Co., John S. Crugar, manager, East Bernstadt, Ky., will open bids August 30 for one 10x10 vertical engine.

Engine.—Columbus Equipment Co., Columbus, O., wants 16x18 or 18x18 center-crank automatic engine.

Excelsior Machinery.—B. Baumgartner, Box 717, Sweetwater, Tex., wants machinery for cutting excelsior.

Excelsior Machinery, etc.—Pinney Excelsior Manufacturing Co., J. H. Miller, vice-president, Bellepoint, W. Va., will want complete outfit of excelsior machinery, boiler, etc.

Evaporators.—J. R. Hix, North Wilkesboro, N. C., wants to correspond with manufacturers of evaporators for drying fruits.

Felt.—A. G. Kiser, Tazewell, Va., wants prices on "Tomb" brand deadening felt, to weigh one and a half pounds to one square yard.

Fertilizer Machinery.—Farmers' Warehouse & Fertilizer Co., W. M. Muschelwhite, president, Reynolds, Ga., wants prices on fertilizer-mixing machinery.

Furniture Machinery.—See "Wire-working Machinery."

Gas Fixtures.—Fayette Gas & Fuel Co., Fayette, Ala., wants prices on gas fixtures and equipment for installing natural gas in houses.

Gasoline Engine.—S. F. Cobb, Alberton, Md., wants prices on 6 to 10-horse-power gasoline engine.

Grinding Machinery.—Southern Manganese Mining Co., R. F. D. No. 1, Elkton, Va., may purchase mill for grinding ore.

Glass.—See "Church Furnishings, etc."

Glass.—J. F. Ange, Winston-Salem, N. C.,

wants to correspond with manufacturers of art glass for residences.

Grading, etc.—Montgomery County Board of Revenue, Montgomery, Ala., will receive bids until noon August 29 for grading and draining Narrow Lane Rd. from Woodley Rd. five miles south; profile and specifications on file at office of J. T. Bullen, County Engineer.

Heating Apparatus.—A. W. Jensen, Amarillo, Tex., wants price on hot-air furnace for 30x50-foot two-story four-room school building.

Heating Plant and Equipment.—D. J. Anderson, 418½ Broad St., Rome, Ga., wants prices on steam and hot-water boilers and general heating apparatus, including pipe, asbestos, covering for pipes, etc.

Heating Plant.—P. F. Conway, chairman building committee Roanoke College (address care of Danville Lumber & Manufacturing Co.), Danville, Va., invites bids on heating plant for \$45,000 college building.

Heating Plant.—Orangeburg County Court-house Commission, Orangeburg, S. C., will receive bids until noon September 14 for complete steam-heating plant; each bidder to furnish plans for plant; further information on application; J. D. Felder, County Supervisor, Orangeburg.

Heating Plant.—Jackson & Co., Whaleyville, Va., want hot-water or steam heater for single-story building of about 1000 square feet with 10½-foot pitch.

Heating Plant.—Dobson & McKinnon, Montgomery, Ala., want prices on direct steam-heating system.

Heating Plant.—M. L. Harrison, Wytheville, Va., wants prices on furnace.

Heating System.—Bids will be received at Department of Interior, Jesse E. Wilson, Assistant Secretary, Washington, D. C., until 2 P. M. September 12 for installation of vacuum heating system for Freedmen's Hospital and Howard University buildings in accordance with drawings and specifications, copies of which, with form of proposal, may be had on application to department named; certified check for \$50 required as guaranty for return of plans loaned; proposals to be addressed to Secretary of Interior.

Heating Plant.—Memorial Methodist Church South, Durham, N. C., will require heating plant for edifice; seating capacity, 2000.

Hoisting Engine.—O. R. Whitney, 39 Cortlandt St., New York, wants double-cylinder and single-drum winding engine; drum each end to coil 700 feet 1½-inch cable; engine to be equipped with link motion reversing friction hoist; immediate delivery; send specifications, price, etc., in first letter.

Hoop-pole Machinery.—Prosper Colony Manufacturing Co., Taft, Fla., will probably want machinery for manufacturing cypress hoop-poles.

Iron, Steel, etc.—P. Cefudo y Nunez, 5 and 7 Imperial St., Madrid, Spain, wants to represent American manufacturers of iron, steel, hardware, sheet metal, wire, copper, aluminum, zinc, tinned iron, lead, etc., and building materials in general.

Jewelers and Watchmakers' Tools.—R. B. Morris, 18 Chumankin Rd., Bombay, India, wants price-lists, terms, etc., from manufacturers of goldsmiths', jewelers' and watchmakers' tools.

Knitting Machinery.—B. Baumgartner, Box 717, Sweetwater, Tex., wants addresses of manufacturers of knitting machinery.

Lathe.—West Point Iron Works, West Point, Ga., wants prices on second-hand engine lathe to swing about 40 inches; about eight feet between centers; hollow spindle preferred.

Lathe.—Jackson Garage Co., 341 North Royal St., Jackson, Tenn., wants prices on 12-inch lathe, six feet between centers.

Lighting Plant.—Dobson & McKinnon, Montgomery, Ala., want prices on approved conduit system of lighting.

Lighting Fixtures.—Treasury Department, office of Supervising Architect, James Knox Taylor, Washington, D. C. Sealed proposals will be received until 3 P. M. September 14, and then opened, for furnishing and installing lighting fixtures in United States buildings at Denison, Tex.; Dixon, Ill.; Fredricksburg, Va.; Hudson, N. Y.; Manitowish, Wis.; New Haven, Conn.; Raleigh, N. C.; St. Augustine, Fla.; Staunton, Va., and Texarkana, Tex., in accordance with drawings and specifications, copies of which may be obtained at this office at discretion of supervising architect; right reserved to reject any and all bids and waive defects; each proposal must be accompanied by certified check in sum of 10 per cent. of aggregate amount thereof, drawn to order of Treasurer of United States, as guarantee of good faith.

Lock and Dam.—U. S. Engineer Office,

Wheeling, W. Va. Sealed proposals for constructing lock and dam No. 12, Ohio River, near Wheeling, W. Va., will be received at this office until 11 A. M. September 16 and then publicly opened; information on application; F. W. Alstaetter, Captain, Engineers.

Locomotive.—See "Railway Construction and Equipment."

Locomotive.—O. R. Whitney, 39-41 Cortlandt St., New York, wants second hand 10x14 36-inch-gauge Vulcan saddle-tank locomotive; immediate delivery; price and full specifications by first letter.

Lumber.—Smith & Wilson, Bristol, Tenn., want 80,000 feet No. 1 common yellow-pine flooring, 125,000 feet yellow-pine framing, 100,000 feet matched No. 2 yellow-pine flooring and 20,000 yards plaster boards.

Marble Tile.—Collins Bros., 1212 Congress Ave., Houston, Tex., want quantity of marble floor tile.

Metal Ceiling.—See "Building Materials, etc."

Mining Equipment, etc.—Central Pocahontas Coal Co., Gary, W. Va., will open bids in November for installation of two boilers, 60 horse-power each; two generators, 125 kilowatts each; incline, fans, etc.

Mining Equipment.—Linganore Copper Co., J. O. Hendricks, secretary, Frederick, Md., wants one Sturdevant ore breaker, 9x15, mining type manganese jaws; one Sturdevant roll, jaw duplex crusher, 6x30; one Sturdevant plain balanced roll, 20x14, with housing; two Sturdevant high-grade automatic balanced rolls, 21x10, with housings; two revolving screens; 75-horse-power engine; 125-horse-power horizontal boiler; four Wifrey concentrating tables.

Mineral Wool.—A. G. Kiser, Tazewell, Va., wants prices on mineral wool.

Novelties.—Francis S. Kovessy, 556 West 140th St., New York, wants addresses of manufacturers of novelties suitable for introduction into Germany.

Paper-Lox Machinery.—A. H. Baker & Co., P. O. Box 194, Pensacola, Fla., want machinery for manufacturing paper boxes.

Pasteboard Boxes.—U. S. Department of Agriculture, Office of Secretary, Washington, D. C. Proposals will be received at office of disbursing clerk until August 26 for furnishing 117,000 pasteboard boxes; full information furnished on application to disbursing clerk; W. M. Hays, Acting Secretary.

Paper-roofing Machinery.—See "Roofing Machinery."

Paving.—City Council, Gadsden, Ala., will receive bids until 8 P. M. August 29 at Council Chamber, City Hall, for construction of 800 square yards cement sidewalks, 2800 square yards cement sidewalks (old cement walk to be removed and new walk laid), and cement walk to replace 250 square yards flagstones; relaying of 1500 square yards 18-inch hexagonal blocks, and 404 square yards brick walk; Wilburn Hill, City Engineer.

Paving.—W. Ross Davis, Mayor, Whiteville, N. C., will receive bids until 2 P. M. September 15 for constructing 12,000 square yards of street; profile on file at Mayor's office, or copy will be furnished on receipt of \$1; each bid to be accompanied by certified check for \$500; W. E. MacDaniel, secretary.

Paving.—Proposals addressed to A. N. Pierce, H. C. Featherston, M. N. Moorman and John T. McKinney will be received at office of Mr. Featherston, Lynchburg, Va., until noon August 29 for granolithic sidewalk paving; bids to be made on blank forms to be obtained at office of H. L. Shaner, City Engineer; each bid to be accompanied by certified check for \$250, payable to A. N. Pierce, Treasurer; plans can be seen, specifications and proposal forms obtained at office of City Engineer; sidewalk is to be laid on Salem turnpike.

Paving.—J. B. Winslett, City Secretary, Dallas, Tex., will receive bids until August 31 for paving Preston St. and Swiss Ave.; each bidder to bid separately on following materials: Bitulithic pavement on concrete base with concrete gutters 24 inches wide; bitulithic pavement with concrete gutters 24 inches wide, bituminous base; rock asphalt pavement with 24-inch concrete gutter; asphalt concrete pavement; vitrified brick pavement from curb to curb; concrete curbs; combination concrete curb and gutter; separate bids to be submitted on each street; certified check for \$250 to accompany each bid on Preston St. paving and for \$1500 each bid on Swiss Ave. paving; specifications on file in office of City Secretary.

Paving.—Board of Commissioners Port of New Orleans, Hugh McCloskey, president, 601-602 Hibernia Bank Bldg., New Orleans, La., will receive bids until 7:30 P. M. Septem-

ber 6 for paving with creosoted wood blocks on concrete foundation roadway on river front from Jackson Ave. to St. Mary St.; deposit, \$500 (cash or certified check); plans, specifications, proposal form, etc., prepared by J. F. Coleman Company, engineers, on file in office of engineer of board, A. C. Bell, 606 Hibernia Bank Bldg., New Orleans, by whom full sets will be furnished on deposit of \$15.

Paving.—City Council, Florence, Ala., will receive bids until 8 P. M. August 29 for construction of crushed limestone roadway and cement sidewalks on Royal and Sherrod Aves., between Seven Points and Cypress Mill Rd.; also for construction of crushed limestone roadway and combined cement curb and gutter and cement sidewalks on Walnut St., between College St. and Military Rd.; plans by City Engineer; separate bids required and certified check as required by specifications; plans, specifications and drawings on file with City Clerk, J. B. White.

Piping, Hydrants, etc.—City of Tarboro, N. C., John A. Weddell, Clerk, will receive sealed bids until September 1 for furnishing 180 tons six-inch and 120 tons six-inch standard iron pipe for water mains; also six tons specials, 22 double fire hydrants, lead and gaskets; state earliest possible delivery.

Piping.—M. L. Harrison, Wytheville, Va., wants prices on piping for hot water and plumbing.

Pier Construction.—Bids will be received at U. S. Engineer Office, Wheeling, W. Va., until 11 A. M. September 15 for constructing three concrete ice piers in Kanawha River; information on application to above office or U. S. Engineer Office, Charleston, W. Va.; F. W. Alstaetter, Captain, Engineers, Wheeling.

Piping.—O'Connor & Garvey, Reidsville, N. C., will need 2500 feet each of 4-inch and 6-inch cast-iron pipe.

Piping.—Palm Beach County Commissioners, West Palm Beach, Fla., will receive bids until noon September 6 at Clerk's office for furnishing galvanized corrugated-metal culvert pipe; each bidder to furnish complete specifications he proposes to furnish, price per linear foot for different sizes delivered at West Palm Beach, and weight per linear foot for each size of pipe; W. H. Da Camara, chairman County Commissioners.

Pottery Machinery.—A. H. Baker & Co., P. O. Box 194, Pensacola, Fla., want machinery for manufacturing clay cups or small-size flower pots.

Power Plant.—Sealed proposals endorsed "Proposals for Power-Plant Equipment" will be received at Navy Department, Washington, D. C., until 11 A. M. October 1, and then publicly opened, for completing power plant at United States Naval Academy, Annapolis, Md.; plans and specifications can be obtained on application to superintendent of Naval Academy, Annapolis, on deposit of \$10 for return of plans; Beekman Winthrop, acting Secretary.

Powder.—W. F. Paul, R. F. D. No. 8, Box 99, San Antonio, Tex., wants prices on carload of powder about September 20.

Pumps.—Jackson Veneer Co., S. H. Andrews, president, Jackson, Ala., wants prices on pumps.

Pumping Machinery.—Fayette Light & Fuel Co., Fayette, Ala., wants prices on pumping machinery for natural gas.

Railway Construction and Equipment.—H. D. Patee, 215 Temple Block, Kansas City, Mo., wants prices on electrical material for 1½ miles of railway, 16,605 tons of 70-pound and 316 tons 60-pound steel track, bolts, nuts, fish plates, spikes, bonds, iron poles, brackets, frogs, switches, ties, posts, bridge material, trolley and feed wires, reducing station complete and rolling stock, including electric locomotive.

Railway Construction Supplies.—H. Dalhoff, Little Rock, Ark., wants prices f. o. b. Memphis, Tenn., or De Vall Bluff, Ark., on 5½-inch spikes for 22 miles of road, 25,040 ties to a mile; also bolts and nuts for 65-pound 30-foot relaying rail for 22 miles, and angle bars for 15 miles.

Road Construction.—R. P. Pearson, County Engineer, Parsons, W. Va., will open bids September 3 for construction of road to replace present Slip Hill Rd.; length 1.946 miles; bids to state price per rod or cubic yard; plans, profiles and details on file at County Engineer's office.

Road Construction.—Trustees for Putnam County Bonds, Stewart Worden, secretary, 722 River St., Palatka, Fla., will receive bids until 10 A. M. September 2 for construction of 10 miles of hard-surfaced road from city limits to Palatka over upper Rice Creek bridge toward Bannerville, Fla.; certified check, \$100; bidders can obtain plans and specifications upon application to R. F. En-

sey, County Engineer; application for specifications to be accompanied by deposit of \$3.

Road Construction.—P. St. J. Wilson, State Highway Commissioner, Richmond, Va., will receive bids until 11 A. M. August 26 at Clerk's office, Leesburg, Va., for construction of three to four miles of macadam road in Purcellville and towards Silcott Springs in Loudoun county; plans and specifications on file in office of Mr. Wilson and at Clerk's office, Leesburg; specifications furnished on application to Mr. Wilson; certified check for \$250 to accompany each bid.

Roofing Machinery.—R. Ries, care of T. C. R. R., Nashville, Tenn., wants to correspond with manufacturers of machinery for manufacture and assembling of roofing; such as used in manufacture of paper roofing.

Safe, etc.—American State Bank, Fitzgerald, Ga., wants prices on safe, vault and other bank fixtures.

Safe, etc.—Florida Land & Title Co., Marianna, Fla., wants prices on safe, vault and other bank fixtures.

Salt.—John S. Bleecker, manager of Columbus Power Co., Columbus, Ga., wants addresses of salt miners and producers in Columbus section.

Screens.—See "Mining Equipment."

Seating.—See "Church Furnishings, etc."

Septic Tanks.—Jewel Cotton Mills, Thomasville, N. C., wants addresses of septic-tank builders.

Sewer Construction.—J. A. Hughes, Mayor, Winchester, Ky., will receive bids until 1 P. M. August 30 for construction of 8½ miles of sewers varying in size from 6 to 15 inches diameter, together with manholes, lampholes, etc.; \$5,000 of bonds to be issued; specifications, instructions to bidders and blank proposal forms may be obtained and plans and profiles seen at office of S. H. Rutledge, City Engineer, Winchester, or office of Charles E. Collins, consulting engineer, Drexel Bldg., Philadelphia, Pa.; Dr. M. S. Brown, chairman sewer committee.

Sewer Construction, etc.—Bob Parman, City Clerk, Oklahoma City, Okla., will receive bids until 9 A. M. August 31 for construction of lateral sewer in various sections of Capitol Hill, Military Park Addition, Parker and Colcord's Addition, College Addition, Dittmar Heights, Westbrook Addition, etc.; also until same date for construction of contact beds for sewer disposal plants of Deep Fork sanitary sewer system, and until same date for construction of bridge to carry sewer across Lightning Creek; plans and specifications on file in office of City Clerk; each bid to be accompanied by certified check for 3 per cent.

Sewer Construction.—P. L. Atherton, chairman Sewerage Commissioners, 605 Equitable Bldg., Louisville, Ky., will receive bids until noon September 2 for construction of Section "F," Beargrass Interceptor, contract No. 73; work to consist of about 940 feet of 39-inch reinforced concrete sewer, 1729 feet of 33-inch plain concrete sewer; 2543 feet of earth excavation, maximum cut 29.5 feet, minimum cut 9.5 feet, average cut about 21.2 feet; about 640 cubic yards concrete and about 25,000 pounds of steel; bids to be accompanied by certified check for at least 7 per cent. of total amount of bid or bidder's bond, as described in form of proposal; plans and specifications on file at office of Harrison P. Eddy, consulting engineer, 14 Beacon St., Boston, Mass., or at office of Commissioners of Sewerage.

Sewer Construction.—Sealed proposals addressed to W. E. Beattie, chairman Paving and Sewer Commission, Greenville, S. C., will be received until 4 P. M. September 10 for construction of sanitary sewer extensions as per plans and specifications adopted; work will consist of about six miles of pipe sewers eight inches in diameter; each bid to be accompanied by certified check for \$1000; plans and specifications can be seen at office of C. P. Ballenger, City Engineer, and specifications will be mailed upon request.

Screens.—Phenix-Jellico Coal Co., John S. Crugar, manager, East Bernstadt, Ky., will open bids August 30 for shaker screens, 7 feet by 34 feet, standard grizzly, 16 feet by 4 feet.

Skidder.—Greensboro Supply Co., Greensboro, N. C., wants 9x12-inch double-cylinder double-drum Lidgerwood skidder outfit, complete; good condition; state when purchased, how long used, actual condition and lowest cash price f. o. b. cars.

Skylights.—C. G. Vardell, Red Springs, N. C., wants to correspond with manufacturers of skylights.

Steam Shovel.—Richlands Brick Corporation, D. G. Robinson, manager, Richland, Va., wants second-hand steam shovel for brick yard; one-half to three-quarter-yard dipper.

Steel (Corset).—Joaquin Herm, Barcelona, Spain, wants to represent American manufacturers of corset steels; 1000 gross lots.

Steel Ferrules.—Hollow Handle Hoe Co., Hope, Ark., wants steel ferrules to fit one-inch steel tubing.

Soap.—William A. Fretwell, Lucama, N. C., wants to correspond with manufacturers of two-ounce cakes of soap for advertising purposes.

Spoons.—William A. Fretwell, Lucama, N. C., wants to correspond with manufacturers of tin-plated steel spoons for advertising purposes.

Tank.—Reynoldsville Silica Co., Reynoldsville, Ill., wants second-hand tank, 24 to 30 inches diameter, three to four feet long, with manhole on side, to stand 80 or 90 pounds steam pressure.

Tank and Tower, etc.—Board of Supervisors of Greene County, S. R. McKay, clerk, Leakesville, Miss., will receive bids until September 5 for erecting water tank and tower, gasoline engine, pump and pump-house, including all necessary piping and fixtures, for use of county jail, for sanitary purposes as per plans and specifications on file in clerk's office in Leakesville; certified check for \$100 to accompany each bid; contractor to furnish all material.

Telephone Equipment.—Harrisburg Telephone Co., J. L. Stafford, president, Harrisburg, N. C., is ready to receive bids on pole wire, crossarms, brace bolts, lay bolts, washers and construction material of all kinds.

Tools.—See "Jewelers' and Watchmakers' Tools."

Tools.—See "Building Materials," etc.

Veneer Machinery.—Jackson Veneer Co., S. H. Andrews, president, Jackson, Ala., wants prices on rotary veneer machinery.

Water-works, etc.—Board of Improvement District No. 2, W. L. Blanks, chairman, Hamburg, Ark., will receive bids until noon August 31 for construction of water-works and electric-light plant; specifications, in-

structions to bidders and blank proposal forms may be obtained on application, and detailed plans are on file at office of board, Hamburg, and office of Willis E. Ayres, engineer, 370 Randolph Bldg., Memphis, Tenn.; each bid to be accompanied by certified check for 3 per cent. of bid.

Water-wheels.—W. W. Womack, Jackson, Miss., wants catalogues of water-wheels; invites complete data on developing water-power to generate electricity for lighting and power.

Welding and Cutting Plant, etc.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 10.30 A. M. September 9 for furnishing oxy-acetylene welding and cutting plant, cold-rolled steel, bronze, drift bolts, copper gaskets, lock washers, water gauges, etc. Blanks and general information relating to circular No. 691 may be obtained at above office or office of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 1086 North Point St., San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Wireworking Machinery.—B. Baumgartner, Box 717, Sweetwater, Texas, wants machinery for weaving wire fence, manufacturing wire bed-springs, shaping furniture, etc.

Windows.—See "Doors, etc."

Woodworking Machinery.—See "Hoop-pole Machinery."

Woodworking Machinery.—Pensacola Buggy Works, Pensacola, Fla., wants band saw, planer, jointer, drills, etc.

McClary as president, Brown Marx Building, Birmingham. The properties will be generally improved, work to this end having already been started and substantial progress made.

American Farm Methods in Russia.

Word has been received at the Chicago office of the International Harvester Co. of America that the first American-made gasoline tractor has been sold in Russia. The sale was made by the McCormick agent at Riga, in Southeastern Russia, to Prince A. Lieven, who owns large estates in Mesothien. It is stated that the widespread use of the American tractor in Russia and Siberia may ultimately solve the high price of wheat in this country. The use of mechanical power on farms of the Canadian Northwest is increasing the grain production of those regions, and it seems that similar results will be obtained in bringing under cultivation wide untitled areas in the Russian Empire. For many years American-made harvesting machines have been operated in the grain-growing districts of Russia, and recently manure spreaders, cream harvesters and tillage implements were adopted by the owners of the large farms.

Completes Large Structure.

Established about 18 years ago for the purpose of executing building construction of various kinds, the Murch Bros. Construction Co. of St. Louis since that time has erected some of the most prominent buildings in the South and Southwest. On August 15 it completed the erection of the new building of the Central Bank & Trust Co. of Memphis, Tenn., having begun erection of the steel work on January 20. This structure is 18 stories high, the two lower stories being of Tennessee marble, while the remaining stories are of brick and terra-cotta. A unique feature in connection with the construction is the use of common red brick with white mortar, a style which is said to be rarely used in the South. Other structures erected by the Murch Company include a department store at Dallas, Tex., for Sanger Bros., 200x100 feet, eight stories high and costing \$400,000, and a nine-story structure at St. Louis for Norvell-Shapleigh Hardware Co., costing about \$300,000. It also has a contract to erect the union station at Memphis, to cost about \$600,000.

TRADE LITERATURE.

Universal Monthly Bulletin.

Monthly bulletin No. 75, the Universal for August, has been issued by the Universal Portland Cement Co. of Chicago and Pittsburg. This publication contains interesting and timely information for users of Portland cement, and presents illustrations of a number of prominent structures in which Universal Portland cement was used.

The Edison Aggregate.

The Edison Aggregate for August has been issued by the Edison Portland Cement Co., New Village, N. J. This publication contains an article on the importance of good workmanship in mixing concrete, and presents numerous illustrations of tanks and other reinforced-concrete structures, together with a variety of ornamental products, in the construction of which Edison Portland cement was employed.

Blaisdell Automatic Sewage Ejector.

As the problem of handling sewage, especially in coast cities and often in large buildings, is becoming such an important subject, a catalogue relating to the Blaisdell automatic sewage ejector should be of particular interest to engineers, architects and others. The Blaisdell sewage ejector is designed especially for the removal of sewage, semi-liquids and other waste from below the sewer level, and recent improvements embody simplicity in design and insure economy of operation. The catalogue referred to presents illustrations of a number of important structures in which the Blaisdell ejectors have been installed. Southern installations including the Marine Barracks, Norfolk; Louisville & Nashville Railroad Co., Louisville; Maryland Theater, Baltimore, and the city of Houston, Tex. This ejector may be operated with either steam, belt or motor driven air compressors, the compressors being placed at any required or convenient distance from the ejector or lift. The Blaisdell system of sewage removal is adapted to sewerage works for towns and cities where proper gravitation cannot be obtained, and is said to preclude the necessity of expensive digging and high cost of construction. It is manufactured and installed by the Blaisdell Machinery Co., main office and plant, Bradford, Pa.

De Laval Centrifugal Pumps.

In a 96-page catalogue entitled "High Efficiency of Centrifugal Pumps" the De Laval Steam Turbine Co., Trenton, N. J., presents some 75 charts, diagrams, photographs and a vast amount of engineering information relating to such subjects as ways and means for testing centrifugal pumps, charts of the results of such tests, the interpretation of these charts for the purposes of the engineers, etc. The publication also discusses the relative importance of different features of pump design, as accessibility, the influence of impeller design upon the efficiency, the question as to the desirability of diffusion vanes, methods of preventing leakage between the discharge and suction chambers, use of suitable bushings, sleeves, etc., to prevent corrosion of important parts, the manufacture of pumps to limit gauges so that all parts are strictly interchangeable, balancing of multistage pumps, and the design of bearings for high speeds. The pumps illustrated are adapted for delivering against heads varying from a few feet up to 1600 feet, as for hydraulic pressure service, while the capacity varies from small boiler feeders up to pumps delivering 30,000 gallons per minute. Valuable suggestions are also presented for drawing specifications and testing pumps to ascertain whether or not specifications have been made.

Contract for More Electric Power.

[Special Dispatch to Manufacturers Record.]

Birmingham, Ala., August 24.

The Tennessee Coal, Iron & Railroad Co. has awarded contract to the General Electric Co. for three turbine electric units of 3000 kilowatts each. This equipment is for furnishing additional power at Ensley plant, which will be distributed to supply deficit in power at the rail mill, coal mines, coke ovens, etc. In addition to the Tennessee Company, the power needs of the American Steel & Wire Co. will be taken care of.

FINANCIAL NEWS

THE MANUFACTURERS RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS RECORD,

Baltimore, Md., August 24.

Business was dull in the Baltimore stock market during the past week. In the trading United Railways common sold at 14½; do. trust certificates, 14½; do. incomes, 60¼ to 59¾, with last sale at 59¾; do. funding 5s, 83 to 82½; do. do. scrip, 83; United 4s, 84¼ to 84¼; Consolidated Gas, Electric Light & Power common, 57; do. preferred, 80; do. notes, 98¼ to 98¾; do. 4½s, 79; Seaboard Company common, 22; do. second preferred, 43¾ to 44; Seaboard 4s, stamped, 82¼ to 82; do. three-year 5s, 90¼; do. 10-year 5s, 90¼; Consolidated Cotton Duck common, 5¼; Mt. Vernon-Woodberry Cotton Duck 5s, 72½ to 72¼; G. B.-S. Brewing firsts, 41.

Bank stock sold as follows: Bank of Baltimore, 121 to 121½; Citizens', 39; Marine, 42¼; First National, 135½; Mechanics', 27; Farmers and Merchants', 47; Union, 118.

Maryland Casualty sold from 90¼ to 91¼; Mercantile Trust, 140.

Other securities were traded in thus: Northern Central Railway stock, 127½ to 126¾, with last sale at 127; Atlanta Gas 5s, 101½; Baltimore City 5s, 1916, water, 103¼ to 104¼; do. 4s, 1925, W. M., 90; do. 3½s, 1940, 92; Lake Roland Elevated 5s, 169½; Norfolk & Portsmouth Traction 5s, 82¼ to 82½; Atlantic Coast Line convertible debenture 4s, 97; do. consolidated 4s, 93¼; Puget Sound Power 5s, 1923, 98; Anacostia & Potomac 5s, 101; Catawba Power Co. first 6s, 1933, 101; Georgia & Alabama consolidated 5s, 103; Fairmont & Clarksburg Traction 5s, 96; Houston Oil preferred, 35; Reading Railroad, 143¼; United States Steel, 70¼; Baltimore Brick preferred, 25 to 25¼; George's Creek Coal & Iron, 9; Knoxville Traction 5s, 102½; Atlanta Consolidated Street Railway 5s, 104¼; Georgia Southern & Florida 5s, 106; Western North Carolina 6s, 105¼; Fair-

[For Additional Financial News, See Pages 67 and 68.]

INDUSTRIAL NEWS OF INTEREST

Establishes Offices at Gastonia.

Announcement is made that the Solomon-Norcross Company, engineer, Atlanta, Ga., has established a branch office at Gastonia, N. C., in charge of S. C. Cornwell, civil engineer.

A Contract for Stevens Company.

It is announced that the H. L. Stevens Construction Co. of El Paso, Tex., has been awarded a contract for the erection of a four-story office and store building at Roswell, N. M., for S. E. Allison. The structure will be of reinforced concrete, to be equipped with all modern fixtures, and will cost about \$100,000.

Will Sell Water-Power Site.

An opportunity for the purchase and development of a water-power for electric light plant and operating yarn mill for hose is presented in an announcement of George A. Smith, Tryon, N. C. An engineering investigation of the site has been completed, showing available minimum power of 161 horsepower per day. Engineering estimates, covering dam work, reservoir and necessary construction, will be available to purchaser.

Virgin Timber for Sale.

Located in Kissimmee Valley, Florida, in the flowing well district, near Sanford, 50,000 acres of virgin timber lands are offered for sale. These lands contain long leaf yellow pine and cypress, and are accessible to railroad and water transportation. After being cleared they are valuable for fruit, truck and farming and other purposes. Maps and details regarding them will be supplied by W. L. Van Duzer, Kissimmee, Fla.

To Erect Hotel in Mexico.

A contract for the erection of the five-story reinforced concrete frame for the Hotel Gante, Mexico City, has been awarded to the William P. Carmichael Co., Fullerton Building, St. Louis. This contract is in addition to a contract for the special raft foundation and waterproof basement already under construction. The structure was designed by Jose Luis Cuevas, architect, Mexico City, and will cost completed about 1,300,000 pesos.

Installing Northern Equipment.

The popularity and efficient service of equipment manufactured and installed by the Northern Engineering Works, Detroit, Mich., are attested by the important contracts which this company is executing. Among other installations the Northern Company is

installing a complete clamshell bucket coal-handling crane system for the Rapid Motor Vehicle Co. of Pontiac, Mich., while a Northern 10-ton crane has already been installed in its power-house. It has also installed a No. 66 Newton patent cupola for the Near-steel Company of Jersey City, N. J., in connection with the remodeling of that company's plant.

Important Pump Shipment.

A large and important shipment of centrifugal pumps has recently been made to Southern Arizona by the Erie Pump and Engine Works of Erie, Pa. These pumps are of the sand and dredging type, 12-inch size, connected to double 12-inch by 12-inch vertical engines, and are intended to equip the plant of a large copper company operating in Arizona. Each pump weighed about 20,000 pounds, the shipment making a full carload. The Erie Pump and Engine Works, which recently succeeded the Erie Pump & Engine Co. in the manufacture of centrifugal pumps and steam engines, is specializing in these products and is supplying a rapidly increasing trade.

To Sell Rock Stone Mills.

Mill property known as the Rock Stone Mills, located at Fishersville, East Brandywine township, Chester county, Pennsylvania, will be offered for sale at public auction on the premises on September 14. This property consists of 27 acres of land; water privilege; main mill building of stone, three stories high, 50x125 feet; engine-house, boiler-house, dyehouse, picker-house, storehouse, reservoir, engines, boilers, tenement-houses and machinery. Harold J. Gross, James H. Hurley and E. Tudor Gross are the auctioneers conducting the sale, and catalogue and information concerning the property may be obtained from G. L. & H. J. Gross, managers of the estates, 170 Westminster St., Providence, R. I.

Yolande Foundry Coke.

Recognized as among the highest grades of foundry coke, the product of the Yolande Coal & Coke Co., Yolande, Ala., is in such demand that the company recently found it necessary to put in blast one hundred ovens to supply the trade, and this is of particular interest as occurring during a dull period. The Yolande group of mines comprise those of the Yolande Coal & Coke Co., New Connelville Coal & Coke Co. and the Abernethy Coal Co. These companies have recently been reorganized, and while operations are conducted by three separate corporations, they are under the same management, with J. B.

FIFTEENTH ANNUAL REPORT OF THE Central of Georgia Railway Company

Savannah, Ga., August 6, 1910.

To the Stockholders:

The Directors submit the following report upon the operations of the Company for the year ended June 30, 1910, and its financial condition at that date:

INCOME ACCOUNT.				
	1910.	1909.	Increase.	Decrease.
Revenue from Transportation:				
Freight revenue.....	\$7,961,474 30	\$7,430,496 80	\$530,977 50	
Passenger service train revenue.....	3,586,661 70	3,280,529 71	306,131 99	
Other transportation revenue.....	220,289 10	190,782 81	29,506 29	
Total.....	\$11,768,425 10	\$10,901,809 32	\$866,615 78	
Revenue from operations other than transportation.....	284,331 04	253,372 99	30,958 05	
Total operating revenues.....	\$12,052,756 14	\$11,155,182 31	\$897,573 83	
Operating expenses.....	8,474,910 34	7,862,036 32	612,874 02	
Operating expenses—percentage of total operating revenues.....	70.32	70.48		
Net operating revenue.....	\$3,577,845 80	\$3,293,145 99	\$284,699 81	
Net revenue from outside operations.....	69,771 07	61,547 91	8,223 16	
Total net revenue.....	\$3,647,616 87	\$3,354,693 90	\$292,922 97	
Taxes.....	59,619 17	487,826 94	52,792 23	
Operating income.....	\$3,106,197 70	\$2,866,866 96	\$240,130 74	
Other income.....	732,991 78	720,655 93	12,335 85	
Total income.....	\$3,839,189 48	\$3,587,522 89	\$251,666 59	
Deductions:				
Interest on equipment trust obligations.....	\$126,376 36	\$157,222 48		\$30,846 12
Interest on funded debt—fixed.....	1,800,680 00	1,788,121 67	\$12,558 33	
Interest on short term notes.....	32,500 00	32,500 00		
Rents of leased lines and other property.....	492,648 07	483,429 58	9,218 49	
Expended for renewals and betterments.....	1,247,678 03	677,596 78	570,111 25	
Reserved for renewals and betterments.....	70,441 53	159,534 67		\$89,090 14
Upper Cahaba Branch Bonds—matured.....	30,000 00	30,000 00		
Greenville and Newnan Main Line Bonds—matured.....	30,000 00	30,000 00		
Taxes on W. Ry. of Ala. stock and C. & W. C. Ry. Co. bonds for period prior to July 1, 1908.....		213,502 50		213,502 50
Miscellaneous.....	8,446 16	12,981 19		4,538 03
Total.....	\$3,838,773 15	\$3,584,861 87	\$253,911 28	
Balance.....	\$1,216 33	\$2,661 02		\$1,444 69
Charged direct to Profit and Loss Account.....	1,216 33	2,661 02		1,444 69
Net Income.....	Nil.	Nil.		

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Received from individuals and companies for side tracks, etc., constructed during the year.....		\$1,171 13
Estimated original cost and removal expenditures, less salvage, of property abandoned during the year and not replaced.....	\$4,176 83	
Adjustment of book value of income bonds owned, acquired by purchase since reorganization.....		1,789 37
The net credit from income account for this fiscal year was.....		1,216 33
	\$4,176 83	\$4,176 83

NEW FORM OF BALANCE SHEET.

Effective June 15, 1910, the Interstate Commerce Commission has prescribed a form of Balance Sheet which differs in many particulars from the form heretofore used by this Company. This form, with its accompanying instructions, is obligatory, and the changes in methods of accounting thus brought about are made without regard to the views of your Board of Directors as to the wisdom or propriety thereof. The new requirements have made necessary the insertion in the Balance Sheet of items from the accounts of the fiscal years 1908 and 1909, which had been otherwise treated. Many of the changes from the last year (the Balance Sheet of June 30, 1909, having been recast for the purpose of comparison) are due exclusively to the prescribed changes of form, being changes in methods of bookkeeping, and not actual changes of condition. Detailed comparison with the Balance Sheet of June 30, 1909, as published in the Annual Report of last year, is impracticable.

Under the contract with the First, Second and Third Preference Income Bondholders, as set out in the mortgages, which provide that "renewals and reasonable betterments to the railroad, equipment and property used by the Railway Company and proper for its economical and efficient operation," shall be deducted from income, appropriate deductions were made from income for each of the fiscal years 1908, 1909 and 1910. Under the prescribed new form of Balance Sheet, all expenditures for additions, improvements and other betterments, whether charged to income or to other accounts, must now be carried among the assets as "Property Investment," and reflected among the liabilities as "Appropriated Surplus." This requirement has been made retroactive from July 1, 1907, and the deductions from income referred to now appear in the Balance Sheet accordingly, notwithstanding the fact that they have, in accordance with the contract with Income Bondholders, been charged to Income Account.

The statement of Financial Condition which follows is a summary of the new form of Balance Sheet:

FINANCIAL CONDITION.				
	Assets.	June 30, 1910.	Comparison with June 30, 1909.	
Property Investment.....		\$62,076,538 84	\$633,983 59	
Working Assets.....		3,319,489 84	1,257,397 38	
Accrued income not due.....		59,999 50	92 50	
Deferred Debit Items.....		915,738 71	80,881 13	
Total.....		\$66,371,757 89	\$1,872,355 00	
Liabilities.				
Stock.....		\$5,000,000 00		
Mortgage, Bonded and Secured Debt.....		54,749,000 00		\$730,617 50
Working Liabilities.....		2,486,244 06	\$1,178,526 23	
Accrued Liabilities not due.....		649,586 08	27,544 51	
Deferred Credit Items.....		290,228 45	18,779 20	
Appropriated Surplus.....		2,638,769 09	1,467,212 70	
Unexpended.....		70,444 53		\$89,090 14
Profit and Loss (Surplus from Previous Years).....		487,494 68		
Total.....		\$66,371,757 89	\$1,872,355 00	

The increase in "Improvements to Property since June 30, 1907, through Income," under Appropriated Surplus, consists of the following:

Improvements—Road—for details see pamphlet report.....	\$1,195,484 22
Improvements—Equipment—for details see pamphlet report.....	28,619 20
Upper Cahaba Branch Bonds matured, paid and cancelled.....	30,000 00
Greenville & Newnan Main Line Bonds matured, paid and cancelled.....	30,000 00
Equipment Trust Obligations matured and paid in excess of the amounts credited to the Equipment Replacement accounts during the year.....	153,109 28
Total.....	\$1,467,212 70

The above items credited to "Improvements to Property since June 30, 1907, through Income," amounting to \$1,467,212.70, were charged as follows:

To the Reserve from Income for Betterments, from the previous year.....	\$159,534 67
To Deductions from Income for the current year.....	1,307,678 03

The increase in Property Investment is explained as follows:

	Increase.	Decrease.
Improvements—Road.....	\$1,195,484 22	
Improvements—Equipment.....	\$28,619 20	\$38,924 70
Less equipment retired.....	67,543 90	
Increases in Reserves for Accrued Depreciation—Credit.....		559,900 97
Equipment—Replacement.....	\$419,964 32	
Rails—Replacement.....	61,968 69	
Bridges—Replacement.....	62,414 33	
Buildings and Structures—Replacement—Decrease.....	4,546 37	
Rails and fastenings under lease.....	8,407 07	
Additional payments on account of stock owned.....	1,303 37	
Chattanooga Station Company.....	\$1,191 49	
Sylvania Central Railway Company.....	111 88	
Value of securities pledged.....		54,965 00
Readjustment from book value to par value of income bonds issued by this Company acquired at reorganization.....		37,880 00
Net Increase.....		533,983 99
Total.....	\$1,295,254 66	\$1,395,251 66

The increase in Improvements—Road and Equipment, consists of the following items, classified according to Interstate Commerce Commission Classification of Additions and Betterments:

CHARACTER OF IMPROVEMENT.		
No.	Amount.	
1 Right of way and station grounds.....	\$21,654 00	
2 Real estate—Credit.....	3,123 28	
3 Widening cuts and fills.....	22,634 72	
5 Grade revisions and changes of lines.....	42,474 28	
7 Bridges, trestles and culverts.....	59,962 69	
8 Increased weight of rail.....	37 82	
9 Improved frogs and switches.....	83,505 56	
10 Track fastenings and other materials.....	32,078 77	
11 Ballast.....	77,402 89	
13 Sidings and spur tracks.....	18,817 32	
14 Terminal yards.....	73 36	
15 Fencing right of way.....	352 59	
17 Track elevation, elimination of grade crossings, etc.....	211 97	
19 Block and other signal apparatus.....	48,565 52	
21 Station buildings and fixtures.....	497,460 85	
22 Shops, engine-houses and turntables.....	270,961 78	
23 Shop machinery and tools.....	4,559 42	
24 Water and fuel stations.....	4,300 00	
25 Grain elevators and storage warehouses—Credit.....	29,444 06	
31 Miscellaneous structures.....	\$1,195,484 22	
Total Way and Structures.....	38,924 70	
33 Equipment—net—Credit.....	\$22,144 05	
Construction of freight train cars.....	259 30	
Construction of work equipment.....	2,865 85	
Electric headlights applied to locomotives.....	1,850 00	
Other betterments to locomotives.....	1,500 00	
Betterments to passenger train cars.....		
	\$28,619 20	
Less equipment retired during year.....	67,543 90	
	\$1,156,559 52	

The increase in Working Assets and Deferred Debit Items is shown in detail on the general balance sheet in the Comptroller's Report.

The decrease in Mortgage, Bonded and Secured Debt represents:

Upper Cahaba Branch and Greenville & Newnan Main Line Bonds matured, paid and cancelled.....	\$60,000 00
Equipment Trust Obligations paid.....	670,617 50
	\$730,617 50

The increases in Working Liabilities, Accrued Liabilities Not Due and Deferred Credit Items are shown in detail on the general balance sheet in the Comptroller's Report.

On a portion of the property the Company carries its own fire risks, charging Operating Expenses and crediting Fire Insurance Reserve with amounts approximating what it would otherwise have to pay in insurance premiums, together with an amount equal to the insurance premiums actually paid.

The increase in the Fire Insurance Reserve, \$28,719.85, shown by the Comptroller's Report, is explained as follows:

	Dr.	Cr.
Balance, July 1, 1909.....		\$114,726 06
Twelve months' approximated premiums.....		120,000 00
Insurance losses recovered.....		4,213 56
Premiums accrued.....	\$80,493 55	
Equipment burned.....	5,329 38	
Sundry fire losses on freight and property.....	7,820 15	
Property of outside parties burned.....	1,850 00	
Balance, June 30, 1910.....	143,445 91	
	\$238,939 62	\$238,939 62

The decrease in the Unexpended Reserve for Improvements under Appropriated Surplus represents the difference between the reserve brought over from the previous year, \$159,534.67, which has been expended, and the amount reserved from income of the current year for betterments to be made in the future of \$70,444.53.

The Equipment Trust Obligations paid or retired during the year are shown by the following table:

Principal of Equipment Trust Obligations.					
Date of trust.	Equipment.	Original issue.	Paid prior to July 1, 1909.	Paid during 12 months ended June 30, 1910.	Out-standing, June 30, 1910.
Sept. 2, 1902..... (Trust "B")	500 box cars..... 5 passenger locomotives..... 15 freight locomotives.....	\$ 288,000 00	\$234,000 00	\$36,000 00	\$18,000 00
Nov. 2, 1903..... (Trust "D")	3 sleeping cars..... 3 1st class passenger coaches..... 3 2d class passenger coaches.....	938,000 00	737,000 00	134,000 00	67,000 00
Jan. 3, 1905..... (Trust "F")	200 box cars..... 800 coal cars..... 5 passenger locomotives.....	462,000 00	264,000 00	66,000 00	132,000 00
Jan. 15, 1905..... (Trust "G")	500 ventilated box cars..... 450 ventilated box cars.....	228,150 00	201,532 50	26,617 50	
Feb. 1, 1906..... (Trust "H")	500 coal cars..... 400 flat cars..... 50 ballast cars..... 10 passenger locomotives.....	1,020,000 00	306,000 00	1/2,000 00	612,000 00
July 2, 1906..... (Trust "I")	30 freight locomotives..... 514 box cars..... 1000 coal cars..... 25 freight locomotives.....	1,950,000 00	575,000 00	230,000 00	1,145,000 00
March 1, 1907..... (Trust "K")	500 box cars.....	760,000 00	152,000 00	76,000 00	532,000 00
Total.....		\$5,646,150 00	\$2,469,532 50	\$870,617 50	\$2,506,000 00

OCEAN STEAMSHIP COMPANY OF SAVANNAH.

The Board of Directors of the Ocean Steamship Company of Savannah have reported as follows:

The operating and financial results for the fiscal year have been satisfactory. A dividend of \$15 per share on the capital stock was declared and paid.

In June the two new steamships contracted for in the preceding fiscal year (the "City of Montgomery" and the "City of St. Louis") were delivered, paid for and placed in the line. They are entirely satisfactory. The replacement by new ships of one or both of the old ships ("City of Augusta" and "Nacoochee") is under consideration.

The facilities for coaling ships at Savannah were completed during the fiscal year and are now in use.

GENERAL REMARKS.

The construction of the extensive shop improvements at Macon, mentioned in the last Annual Report, has been continued during the year and has progressed satisfactorily. We were disappointed in the hope that the entire plant would be completed during the present fiscal year, but it will probably be completed by January 1.

A dividend of \$300,000 was received on capital stock of the Ocean Steamship Company of Savannah, and was credited to income account.

The total operating revenues for the year exceed those for the preceding year by \$897,573.83, of which \$530,977.50 was in Freight Revenue and \$281,731.41 was in Passenger Revenue. The operating expenses for the year exceed those of the preceding year by \$612,874.02. This was due in part to the increased business, but Operating Expenses include \$152,244.94 for old shop buildings and tracks abandoned in connection with the construction of the new shops at Macon. The operating ratio (exclusive of taxes) was 70.32 per cent. in 1910, against 70.48 per cent. in 1909. Taxes increased \$52,792.23, of which \$43,645.25 was due to the new Federal Corporation Tax. This tax for the calendar year 1909 has been paid under protest. The percentage of the maintenance account and transportation expenses to gross earnings was substantially the same as in the preceding fiscal year.

Attention is called to the report of the General Manager covering the operation and the physical condition of the property, and to the report of the Comptroller with respect to financial condition, results of operation in detail and statistics as to operation and traffic.

The Company's accounts have been examined by Messrs. Haskins & Sells, Certified Public Accountants. A copy of their certificate immediately precedes the Comptroller's Report.

Acknowledgment is made to officers and employees for faithful and efficient service.

By order of the Board of Directors.

J. F. HANSON, President.

Central of Georgia Railway Company

OFFICE OF GENERAL MANAGER.

Savannah, Ga., August 6, 1910.

Mr. J. F. HANSON, President:

Sir—The following report on the operation and physical condition of the property for the fiscal year ended June 30, 1910, is submitted:

MILES OF ROAD OPERATED JUNE 30, 1910.

	In Georgia.	In Ala. bama.	In Tennessee.	Total.
Owned—Under First and Consolidated Mortgages:				
Savannah to Atlanta, Ga.	294.73			294.73
Gordon to Milledgeville, Ga.	17.32			17.32
Total.....	312.05			312.05
Owned—Under Divisional and Consolidated Mortgages:				
Dover to Brewton, Ga. (Oconee Division).....	77.02			77.02
Milledgeville to Covington, Ga. (M. G. & A. Division).....	64.57			64.57
Macon Junction to Athens, Ga. (Macon & Northern Division).....	101.78			101.78
Columbus, Ga., to Andalusia, Ala. (Mobile Division).....	1.14	136.82		137.96
Carrollton, Ga., to Chattanooga (Shops), Tenn. (Chattanooga Division).....	133.79		3.78	137.57
Chickamauga to Durham, Ga. (Chattanooga Division).....	17.54			17.54
Lyerly, Ga., to Dewey, Ala. (Chattanooga Division).....	6.85	2.52		9.37
Greenville to Raymond, Ga. (Greenville & Newnan Main Line Division).....	23.67			23.67
*1.67 M. P. to Margaret, Ala. (Upper Cahaba Branch Division).....		10.49		10.49
Total.....	426.36	149.83	3.78	579.97
Owned—Under Consolidated Mortgage:				
Savannah to Tybee, Ga.	17.70			17.70
Meldrum to Lyons, Ga., 58.09 miles, leased to Georgia & Alabama Railway Co.				
Barnesville to Thomaston, Ga. (Entire stock owned).....	16.25			16.25
Griffin to Carrollton, Ga.	60.00			60.00
Covington to Porterdale, Ga.	4.05			4.05
Americus to Columbus, Ga.	62.34			62.34
Columbus to Greenville, Ga.	49.26			49.26
Columbus, Ga., to Birmingham, Ala.	1.07	155.27		156.34
Opelika to Roanoke, Ala.		26.12		26.12
Montgomery to Eufaula, Ala.		79.65		79.65
Eufaula to Ozark, Ala.		60.00		60.00
*Henry Ellen to 1.67 M. P. Upper Cahaba Branch.....		1.67		1.67
Total.....	210.67	332.71		543.38
Grand Total—Owned.....	949.08	482.54	3.78	1,435.40
Leased:				
Augusta & Savannah Railroad:				
Millen to Augusta, Ga.	53.21			53.21
Southwestern Railroad:				
Macon, Ga., to Eufaula, Ala.	142.60	1.00		143.60
Fort Valley to Columbus, Ga.	71.00			71.00
Fort Valley to Perry, Ga.	12.50			12.50
Smithville, Ga., to Columbia, Ala.	83.61	1.40		85.01
Cuthbert to Fort Gaines, Ga.	20.50			20.50
Chattahoochee & Gulf Railroad:				
Columbia to Lockhart, Ala.		91.47		91.47
Total.....	383.42	93.87		477.29
Owned Track on Leased Right of Way:				
Chattanooga, Tenn. (Shops to N. C. & St. L. Connection).....			.13	.13
Trackage Rights:				
C. N. O. & T. P. and Alabama Great Southern Railways:			.59	.59
Chattanooga, Tenn.				
Western Railway of Alabama, between Opelika and East Alabama Junction.....		2.44		2.44
Total miles operated.....	1,332.50	578.85	4.50	1,915.85

*164.7 shares pledged.

*Changed from previous years to adjust an erroneous classification of 1.67 miles of spur track converted into main line track.

REVENUES, EXPENSES AND TAXES.

	1910.	1909.	Inc.	Dec.	Per cent. of inc. or dec.
Revenue from Transportation:					
Freight revenue.....	\$7,961,474 30	\$7,430,496 80	\$530,977 50		7.15
Passenger service train revenue.....	3,586,661 70	3,280,529 71	306,131 99		9.33
Other transportation revenue.....	220,289 10	190,782 81	29,506 29		15.47
Total.....	\$11,768,425 10	\$10,901,809 32	\$866,615 78		7.95
Revenue from operations other than transportation.....	284,331 04	253,372 99	30,958 05		12.22
Total Operating Revenues.....	\$12,052,756 14	\$11,155,182 31	\$897,573 83		8.05

REVENUES, EXPENSES AND TAXES.—Continued.

	1910.	1909.	Inc.	Dec.	Per cent. of inc. or dec.
Operating Expenses:					
Maintenance of way and structures.....	\$1,882,235 29	\$1,544,714 34	\$337,520 95		21.85
Maintenance of equipment.....	2,036,096 46	2,119,689 22	(\$83,592 76)		3.94
Traffic expenses.....	377,013 40	321,620 94	55,392 55		17.22
Transportation expenses.....	3,684,768 53	3,432,074 70	252,693 83		7.36
General expenses.....	494,806 57	443,537 12	50,269 45		11.46
Total.....	\$8,474,910 34	\$7,862,036 32	\$612,874 02		7.80
Operating expenses—Percentage of total operating revenues.....	70.32	70.48		.16	.23
Net operating revenue.....	\$3,577,845 80	\$3,293,145 89	\$284,699 91		8.64
Net revenue from outside operations.....	69,771 07	61,547 91	8,223 16		13.36
Total net revenue.....	\$3,647,616 87	\$3,354,693 80	\$292,922 97		8.73
Taxes.....	540,619 17	487,826 94	52,792 23		10.82
Operating income.....	\$3,106,997 70	\$2,866,866 86	\$240,130 84		8.38

OPERATING REVENUES, OPERATING EXPENSES AND TAXES AND OPERATING INCOME, AVERAGES PER MILE OPERATED, AVERAGES PER REVENUE TRAIN MILE, ETC.

	1910.	1909.	1908.	1907.	1906.	1905.
Years Ended June 30,	Note 1.	Note 1.	Note 1.			
Average miles operated.....	1,915.85	1,915.85	1,913.41	1,899.06	1,877.83	1,877.83
Revenue service train miles.....	6,157,096	5,747,506	5,981,685	6,801,125	6,154,064	5,728,840
Revenue tons one mile per mile operated.....	744,546,658	688,462,146	703,414,332	780,248,231	701,066,873	655,231,752
Revenue passengers one mile.....	388,625	359,351	367,623	410,880	373,330	316,979
Revenue passengers one mile per mile operated.....	144,496,712	127,806,219	127,512,226	121,753,377	112,175,658	101,319,130
Operating Revenues—Note 2.....	\$12,139,392 23	\$11,229,345 85	\$11,456,835 10	\$12,082,777 38	\$11,396,122 53	\$10,125,064 69
Operating revenues per mile operated.....	6,336 29	5,861 25	5,987 65	6,362 51	6,068 77	5,397 22
Operating revenues per revenue train mile.....	1 97	1 95	1 91	1 78	1 85	1 77
Operating expenses and taxes—Note 2.....	9,032,394 53	8,362,478 89	8,975,342 93	9,006,216 10	8,235,212 54	7,417,966 04
Operating expenses and taxes per mile operated.....	4,714 56	4,364 89	4,690 75	5,058 41	4,385 49	3,950 29
Operating expenses and taxes per revenue train mile.....	1 47	1 45	1 50	1 41	1 34	1 30
Operating expenses and taxes—percentage of operating revenues.....	74.41	74.47	78.34	79.50	72.26	73.19
Operating income.....	\$3,106,997 70	\$2,866,866 86	\$2,481,492 17	\$2,476,561 28	\$3,160,909 99	\$2,717,088 65
Operating income per mile operated.....	1,621 73	1,496 39	1,296 90	1,304 10	1,683 28	1,446 93
Operating income per revenue train mile.....	50	50	41	37	51	47
Operating income—percentage of operating revenues.....	25.59	25.53	21.66	20.50	27.74	26.81

Note 1.—On basis of accounting prescribed by the Interstate Commerce Commission effective July 1, 1907, as amended July 1, 1908, except as indicated by Note 2.

Note 2.—Includes Outside Operations, i. e., Sleeping Cars, Parlor Cars, etc.

EXTENSIONS AND SIDE-TRACKS.

One hundred and sixty-four new side and spur tracks, including additions to yards, aggregating 22,015 miles, were constructed, and 42 side and spur tracks extended, aggregating 3,736 miles, making a total of 25,751 miles of side and spur tracks constructed during the year. 6,495 miles of side and spur tracks were removed or shortened.

CROSSTIES.

Nine hundred and one thousand three hundred and ten crossties were placed in track in repair work during the year.

BALLAST.

Stone, slag, gravel and cinder ballast were placed under 27.92 miles of main track during the year.

BRIDGES AND TRESTLES.

There has been expended in renewing and strengthening iron and steel bridges on certain parts of the line, to permit the use of heavier power, \$603,494.38. Included in this work the following bridges are particularly mentioned as having been contracted for and partially completed during the year:

Eight 80-foot and two 51-foot deck plate girders on five new concrete piers across Chattahoochee River, between Columbus and Birmingham.

One new through riveted truss, 128 feet long, and two new deck plate girders, 64 feet long each, on one new concrete pier at Uchee Creek, between Columbus and Union Springs.

Two new concrete piers on pile foundations were built at Little River, between Macon and Athens, to carry one through pin connected truss, 114 feet long, removed from Kinchafoonee Creek.

Three new concrete piers to carry two new 60-foot deck plate girders at Upatoi Creek, between Columbus and Americus.

Two new concrete piers and one concrete abutment at Oconee River, between Macon and Athens, to carry one 158-foot deck pin truss removed from Chattahoochee River, and one 60-foot deck plate girder removed from A-38, between Columbus and Birmingham.

One new 100-foot deck plate girder at Chattahoochee Creek, between Columbus and Birmingham.

One new 80-foot deck plate girder at Sandy Creek, between Columbus and Birmingham.

One new cross-tied pile and timber abutment was built at A-38, between Columbus and Birmingham, to carry one new 58-foot and one 30-foot deck plate girder.

Three new concrete piers on rock foundations at Hard Labor Creek, between Macon and Athens, to carry one deck pin span 103 feet long and one 158 feet long.

Three new concrete piers on rock foundations at Apalachee River, between Macon and Athens, to carry two 158-foot deck pin trusses.

Seven million eight hundred and twenty thousand two hundred and twenty-four feet of timber (board measure) were used in repairing, rebuilding and constructing bridges and trestles.

Eleven trestles, aggregating 2087½ feet of track, or 0.395 mile, were filled with earth and suitable waterways provided, and two more trestles, aggregating 826 feet of track, or 0.156 mile, were nearly completed, at a total cost of \$23,007.85.

STEEL RAILS.

3,562.14 tons of 90-pound new steel rails, aggregating 25,207 miles of track, and 3,033.06 tons of 80-pound new steel rails, aggregating 24,402 miles of track, and 34 ton of 75-pound new steel rails, aggregating .003 mile of track, and 31 ton of 70-pound new steel rails, aggregating .003 mile of track, a grand total of 6,595.54 tons, or 49,615 miles of track, received on this and previous year's purchases, were placed in track. Detail of rail in track is shown in pamphlet report.

BUILDINGS.

There was expended on new shop buildings, machinery, etc., at Macon, Georgia, during the present fiscal year, \$915,283.16. The Engine Terminal reported under way last year has been completed; also cinder pits, oilhouse, office building, storehouse,

woodworking shop, steel water tank, blacksmith shop, timekeeper's booth, yard tracks and grading. The erecting and machine shop and boiler and tank shop are under construction and nearing completion. The structures will all be finished by September 1, thus completing the new shop plant undertaken in 1908. The installation of the machinery will follow as quickly as possible, and with no unforeseen delays, the new shops should be in full operation by December 1.

An extension to the General Office Building, Savannah, Georgia, 117 feet long, and three stories high, of same general character of construction, was completed at a cost of \$27,902.08.

A new passenger station of special design, estimated to cost \$8,000, is nearing completion at Millen, Georgia, there having been expended on same in this fiscal year \$6,797.35.

There was expended during the year \$1,993.41 in the construction of a shelter shed, 150 feet long and 15 feet wide, with cement walks, connected with the passenger station at Cuthbert, Georgia.

An umbrella shed, for accommodation of passengers, was constructed at Railroad street, Covington, Georgia, at a cost of \$224.09.

A new class "B" combination freight and passenger depot was constructed at Coleman, Georgia, replacing very old structure, at a cost of \$1,773.21.

A new class "B" combination freight and passenger depot was constructed at Kellyton, Alabama, at a cost of \$1,697.64, to replace building destroyed by fire on December 10, 1909.

A new class "D" combination freight and passenger depot was constructed at Bufalo, Alabama, at a cost of \$1,045.29.

A freight depot of brick construction, 46 feet wide by 239 feet long, two stories high for 62 feet at the Market street end, was built at Chattanooga, Tennessee, on which was expended during the current year \$27,479.93.

A frame extension, 100 feet long, was added to the freight warehouse at Albany, Georgia, at a cost of \$2,727.59.

A brick extension, 60 feet long, was added to the freight warehouse at Dothan, Alabama, at a cost of \$2,520.98.

A cotton platform, costing \$568.71, was erected at Lafayette, Alabama.

A section laborers' house was constructed at Hucoda, Alabama, at a cost of \$704.32, to replace building destroyed by fire on January 17, 1910.

During the fiscal year 4,182,376 feet of timber (board measure) were used in constructing new buildings and platforms and in repairs and extensions to old buildings and platforms.

A high service 50,000-gallon capacity water tank on Phoenix columns was erected at Reynolds, Georgia, \$1,756.38 having been expended on the work during the current year.

A high service water tank on steel columns was erected at Wadley, Georgia, at a cost of \$1,676.67.

A gasoline air-lift pump for supplying water was installed at Fitzpatrick, Alabama, at a cost of \$1,627.73 in the present fiscal year.

Two standpipes were erected at Alexander City, Alabama, at a cost of \$967.70.

Many station buildings and section-houses have been remodeled and added to and water stations improved.

There was paid for the purchase of right of way and other real estate on the different divisions during the year \$22,589.80.

There was expended on paving and curbing of certain streets and improving roadways leading therefrom in various places \$6,088.47.

A contribution of \$3,400 was made to the City of Dothan, Alabama, said amount being as part payment for the construction of a storm sewer, as per agreement dated April 11, 1910, under which agreement we are released from any further claims for damages by overflow of water.

EQUIPMENT.

Three locomotives were sold.
Current repairs on locomotives were as follows:
144 over \$1,000 each;
55 between \$1,000 and \$500 each;
113 between \$500 and \$100 each.

The cost of current repairs to locomotives averaged \$1,904.49.
The present standard of our passenger equipment has been maintained at an average cost for current repairs of \$657.

The following passenger equipment was condemned and retired during the year:
Sleeping Car No. 12, and
Inspection Car No. 4.

The cost of current repairs to the Company's freight equipment averaged \$66.47 per car. On all cars (foreign and owned), receiving current repairs, the average was \$6.54 per car.

Thirty-two Coal Cars, Six Box Cars and One Caboose were built in the Company's shops in replacement.

\$7,988.77 was expended this fiscal year in installing new 80-foot steel turntable, also cinder pit, sand dryer and engine storage tracks at Chattanooga, Tennessee.

The 70-foot turntable, removed from the old roundhouse at Macon, Georgia, was installed at Eatonton, Georgia, at cost of \$1,736.09.

The 60-foot iron turntable, removed from Atlanta, was installed at Troy, Alabama, at cost of \$852.77.

A car-wheel press, costing \$1,417.94, was purchased and installed at Cedartown Shops.

The locomotive crane, now in use at Savannah Shops, was equipped with an electric magnet at cost of \$1,146.69.

A vacuum coach cleaner was purchased for use at Savannah at cost of \$457.75.

A vacuum pump with necessary pipe line was installed in Savannah Shops for steam-heating purposes at cost of \$672.47.

INVENTORY OF EQUIPMENT, JUNE 30.

Classes.	Owned.	Under equipment trusts.	Total June 30, 1910.	Total June 30, 1909.
Locomotives:				
Standard.....	207	105	312	315
Total.....	207	105	312	315
Passenger Train Equipment:				
Sleeping Cars.....	11	3	14	15
Chair Cars.....	1	.....	1	2
Passenger Cars.....	137	6	143	143
Combination Cars.....	26	.....	26	28
Baggage, Mail and Express Cars.....	62	.....	62	63
Total.....	237	9	246	251
Freight Train Equipment:				
Box Cars—Ventilated.....	2,380	950	3,330	3,367
Box Cars—Common.....	640	1,714	2,354	2,413
Stock Cars.....	90	.....	90	90
Coal Cars.....	594	2,300	2,894	3,255
Charcoal Cars.....	1	.....	1	1
Coke Cars.....	4	.....	4	4
Flat Cars.....	682	400	1,082	1,139
Caboose.....	129	.....	129	132
Total.....	4,590	5,364	10,224	10,401
Service Equipment:				
Officers' Cars.....	4	.....	4	4
Inspection Cars.....	4	.....	4	4
Wrecking Cars.....	5	.....	5	5
Unloading Cars.....	4	.....	4	4
Spreader Cars.....	4	.....	4	4
Steam Shovels.....	4	.....	4	4
Steam Pile Drivers.....	3	.....	3	3
Ballast Cars.....	19	59	69	69
Cinder and Slag Cars.....	30	.....	30	43
Plow Cars.....	1	.....	1	1
Miscellaneous Roadway Cars.....	298	.....	298	197
Total.....	286	50	336	339

SUMMARY AND ANALYSIS OF CHANGES DURING THE YEAR.

Classes.	On hand June 30, 1909.	New equipment received.	Transferred from other classes.	Condemned, destroyed or sold.	Transferred to other classes.	Total equipment June 30, 1910.
Locomotives.....	315	.....	.....	315	.....	312
Passenger train equipment.....	251	.....	.....	251	.....	246
Freight train equipment.....	10,401	40	.....	10,441	30	10,224
Service equipment.....	339	1	34	374	1	336

CHANGES IN EQUIPMENT DURING FOURTEEN YEARS.

Classes.	On hand June 30, 1896.	Built and purchased.	Acquired with new lines.	Transferred from other classes.	Condemned, destroyed or sold.	Transferred to other classes.	Total equipment June 30, 1910.
Locomotives.....	151	152	18	.....	381	.....	312
Passenger train equipment.....	306	68	12	.....	286	.....	312
Freight train equipment.....	4,892	7,140	395	93	12,530	1,962	10,224
Service equipment.....	148	93	1	306	548	49	336

GENERAL REMARKS.

The construction of the new freight depot and other facilities at Chattanooga, Tennessee, heretofore referred to, were much-needed improvements, as they will enable us to take care of our business in our own quarters instead of using jointly the terminals of another line.

Acknowledgment is due to the officers and employees of the Company for the fidelity and efficiency with which they have served its interests.

Respectfully submitted,

T. S. MOISE, General Manager.

MILES OF MAIN TRACK AND WEIGHT OF STEEL RAILS AND MILES OF SIDE AND SPUR TRACKS, JUNE 30, 1910 AND 1909.

	90-lb.	80-lb.	75-lb.	70-lb.	68½-lb.	65-lb.	63½-lb.	60½-lb.	60-lb.	56-lb.	50-lb.	Total, 1910.	Total, 1909.	Miles of Side and Spur Tracks, 1910.	Miles of Side and Spur Tracks, 1909.
Owned Main Track Operated:															
Savannah to Tyler, Ga.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17.70	17.70	3.20	2.82
Savannah to Atlanta, Ga.....	268.51	.....	.....	21.50	.....	.....	.....	.....	.....	.....	.....	294.73	294.73	227.48	221.34
*Barnesville to Thomaston, Ga.....	.....	1.40	.....	.....	.....	.....	.....	.....	.....	13.45	.....	16.25	16.25	1.53	1.51
Griffin, Ga., to Chattanooga, Tenn.....	143.07	.....	.....	16.40	.....	.....	.....	.....	.....	7.30	.....	197.57	197.57	52.88	51.34
Gordon to Porterdale, Ga.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23.30	.....	85.94	85.94	9.71	9.58
Americus to Columbus, Ga.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62.34	62.34	4.85	4.77
Columbus to Raymond, Ga.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72.93	72.93	11.00	10.85
Columbus, Ga., to Birmingham, Ala.....	25.02	112.62	16.20	2.50	.....	.....	.....	.....	.....	.....	.....	156.34	156.34	52.74	49.50
Opelika to Rome, Ala.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36.12	36.12	3.48	3.48
Eufaula to Montgomery, Ala.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79.65	79.65	11.91	11.28
Eufaula to Ozark, Ala.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69.00	69.00	2.96	2.99
Dover to Brewton, Ga.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77.02	77.02	5.67	5.53
M. & A. Junction to Athens, Ga.....	1.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	101.78	101.78	12.05	11.35
Columbus, Ga., to Andalusia, Ala.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	137.96	137.96	17.58	17.55
Chickamauga to Durham, Ga.....	16.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17.54	17.54	4.51	4.41
Lyerly, Ga., to Dewey, Ala.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9.37	9.37	.....	.....
Henry Ellen to Margaret, Ala.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.16	12.16	2.70	2.70
Total.....	25.02	542.70	18.50	118.43	41.96	.....	.....	.....	.....	313.11	3.30	1,435.40	1,435.40	427.60	414.46
Leased Main Track Operated:															
Augusta & Savannah Railroad—															
Millen to Augusta, Ga.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53.21	53.21	17.26	17.09
The Southwestern Railroad—															
Macon, Ga., to Eufaula, Ala.....	.....	77.30	.....	21.60	.....	28.60	.....	.....	.....	1.30	.....	143.60	143.60	54.45	51.06
Fort Valley to Columbus, Ga.....	.....	71.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.00	71.00	17.03	16.66
Fort Valley to Perry, Ga.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.50	12.50	1.93	1.88
Smithville, Ga., to Columbus, Ala.....	.....	14.10	.....	19.20	.....	.....	.....	.....	.....	.....	.....	85.01	85.01	24.20	24.03
Cuthbert to Fort Gaines, Ga.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20.50	20.50	3.51	3.51
Chattahoochee & Gulf Railroad—															
Columbia to Lockhart, Ala.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91.47	91.47	11.46	9.49
Total.....	.....	162.40	.....	21.60	59.71	28.60	.....	.....	.....	111.60	.....	477.29	477.29	129.84	123.72
Owned Main Track Operated on Leased Right of Way:															
From Chattanooga Shops to connection with N. C. St. L. Railway at Chattanooga.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Owned Second Track Operated:															
Hapeville to East Point, Ga.....	.....	2.73	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.73	2.73	.....	.....
28.6 M. P. to Southern Ry. Crossing at Griffin, Ga.....	.....	3.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.03	3.03	.....	.....
Total.....	.....	5.76	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.76	5.76	.....	.....
Recapitulation:															
Owned Main Track Operated.....	25.02	542.70	18.50	118.43	41.96	.....	.....	.....	.....	313.11	3.30	1,435.40	1,435.40	427.60	414.46
Leased Main Track Operated.....	.....	162.40	.....	21.60	59.71	28.60	.....	.....	.....	111.60	.....	477.29	477.29	129.84	123.72
Owned Main Track Operated on Leased Right of Way.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Owned Second Track Operated.....	.....	5.76	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.76	5.76	.....	.....
Total, June 30, 1910.....	25.02	710.86	18.80	170.03	95.67	28.60	.....	.....	.....	424.84	3.30	1,918.58	.....	557.44	.....
Total, June 30, 1909.....	.....	691.47	16.40	174.17	99.38	28.67	.....	.....	.....	457.17	3.30	.....	1,918.58	.....	538.18

*Upson County Railroad; entire stock owned.

mont coal first 5s, 95; Consolidation Coal refunding 4 1/2s, 92.

SECURITIES AT BALTIMORE.

Last quotations for the week ended August 24, 1910.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast of Conn.	100	221	227
Charleston Consolidated.	50	30	...
Fairmont & Clarks Trac. Pfd.	100	92	75
Georgetown & Fla. 1st Pfd.	100	92	...
Norfolk Railway & Light.	25	20	...
Seaboard Company Common.	100	20	...
Seaboard Company 1st Pfd.	100	75	...
Seaboard Company 2d Pfd.	100	43 1/2	45
United Rys. & Elec. Co.	50	14 1/2	14 1/2

Bank Stocks.	Par.	Bid.	Asked.
Citizens'.	10	28	40
Commercial & Farmers.	100	106	...
Farmers & Merchants.	40	46	47
First National.	100	152	...
German-American.	100	106	...
German.	100	102	...
Maryland.	20	23	24
Merchants.	100	177	178
Bank of Baltimore.	100	129 1/2	125
Bank of Commerce.	15	29	...
Marine.	30	41	42
Mechanics.	10	26	...
Union.	100	119	120
Second National.	100	137	...
Western.	30	35	...

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding.	25	75	78
Baltimore Trust.	100	167 1/2	...
Fidelity & Deposit.	50	145 1/2	147
Maryland Trust.	100	68	...
Maryland Trust Pfd.	100	58	100
Maryland Casualty.	25	92 1/2	...
Mercantile Trust & Deposit.	50	139	141
Union Trust.	50	70	...
F. S. Fidelity & Guaranty.	100	133	137

Miscellaneous Stocks.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron.	100	15	31
Ala. Con. Coal & Iron Pfd.	100	50	70
Con. Cotton Duck Common.	50	...	6 1/2
Con. Cotton Duck Pfd.	50	...	20
Con. Gas, Elec. Lt. & P. Com.	100	56	60
Con. Gas, Elec. Lt. & P. Pfd.	100	87	90
Consolidation Coal.	100	107	110
G. B. S. Brewing Co.	100	...	3
Georges Creek Coal.	100	8	...

Railroad Bonds.	Par.	Bid.	Asked.
Atlantic Coast 1st 4s.	100	93 1/2	93 3/4
Atlantic Coast Conv. Deben. 4s.	100	85 1/2	87 1/2
Atlan. Coast (Conn.) 4s, Cfs.	5-20s	88 1/2	...
Atlantic Coast (Conn.) 4s, Cfs.	...	88 1/2	...
Atlan. Coast, L. & N. Col. Tr. 4s.	100	91 1/2	91 3/4
Baltimore & Cumberland 1st 5s.	100	105	...
Baltimore & Harrisburg 5s.	100	104 1/2	105
Baltimore & Harrisburg Ext. 5s.	100	103	...
Coal & Iron Railway 5s.	100	99 1/2	...
Georgia & Alabama 5s.	100	103	104
Georgia, Car. & North. 1st 5s.	100	103 1/2	...
Georgia Pacific 1st 5s.	100	111	...
Georgia South. & Fla. 1st 5s.	100	105 1/2	106 1/2
Macon, Dublin & Savannah 5s.	100	98	90
Maryland & Pennsylvania 4s.	100	95	...
Petersburg Class A 5s.	100	107	...
Piedmont & Cumberland 1st 5s.	100	99 1/2	99 3/4
Potomac Valley 1st 5s.	100	105	...
Raleigh & Augusta 1st 5s.	100	114	...
Raleigh & Gaston 5s.	100	106	...
Richmond & Danville 6s.	100	104 1/2	...
Savannah, Fla. & West. 5s.	100	109	...
Seaboard Air Line 4s.	100	82 1/2	...
Seaboard 4s, Stamped.	100	81 1/2	82 1/2
Seaboard Adjustment 5s.	100	96 1/2	97
Seaboard 10-year 5s.	100	99 1/2	99 3/4
Seaboard 3-year 5s.	100	99 1/2	99 3/4
Seaboard & Roanoke 5s.	100	103	...
Seaboard & Roanoke 6s.	100	100	...
South Bound 5s.	100	105	...
Southern Railway Con. 5s.	100	104 1/2	...
Suffolk & Carolina 5s.	100	94	95
Virginia Midland 2d 6s.	100	104 1/2	100 1/2
Virginia Midland 3d 6s.	100	102	...
Virginia Midland 4th 5s.	100	102	...
Virginia Midland 5th 5s.	100	104	...
Washington-Vandemere 4 1/2s.	100	90	...
Western N. C. Con. 6s.	100	105 1/2	...
West Va. Central 1st 6s.	100	100 1/2	100 1/2
Wilmington & Weldon 5s.	100	108 1/2	108 3/4

Street Railway Bonds.	Par.	Bid.	Asked.
Anacostia & Potomac 5s, Gtd.	100	103 1/2	104
Atlanta Con. Street Railway 5s.	100	104	104 1/2
Balto. City Pass. 5s.	100	99 1/2	100
Balto. Sp. Pl. & C. 4 1/2s.	100	90	92 1/2
Balto. Traction 1st 5s.	100	105	...
Balto. Traction (N. Balto.) 5s.	100	108	...
Central Railway (Balto.) Con. 5s.	100	108	...
Charleston City Railway 5s.	100	101	...
Charleston Con. Electric 5s.	100	91	94
City & Suburban 5s (Balto.).	100	105 1/2	...
City & Suburban 5s (Wash.).	100	100	...
Fairmont & Clarksburg Trac. 5s.	100	93 1/2	96
Knoxville Traction 5s.	100	102	...
Lake Roland Elevated 5s.	100	105	110
Lexington Railway 1st 5s.	100	95	97
Macon Railway & Light 5s.	100	96	97 1/2
Maryland Electric Railway 5s.	100	97 1/2	98 1/2
Memphis Street Railway 5s.	100	97 1/2	98 1/2
Newport News & Old Point 5s.	100	97 1/2	98 1/2
Norfolk & Portsmouth Trac. 5s.	100	82 1/2	82 1/2
Norfolk Railway & Light 5s.	100	97 1/2	98 1/2
Richmond Traction 5s.	100	104 1/2	...
United Railways 1st 4s.	100	84 1/2	...
United Railways Inc. 4s.	100	59 1/2	59 1/2
United Railways Pdg. 5s.	100	82 1/2	83 1/4

Miscellaneous Bonds.	Par.	Bid.	Asked.
Atlanta Gas 1st 5s.	100	101	...
Baltimore Electric 5s, Stp.	100	88 1/2	...
Consolidated Gas 5s.	100	107 1/2	108 1/2
Consolidated Gas 4 1/2s.	100	91	93
Consolidation Coal Refldg. 4 1/2s.	100	98 1/2	98 1/2
Con. Gas, Elec. Lt. & P. Notes.	100	79	80
Con. Gas, Elec. Lt. & P. 4 1/2s.	100	79	80
Fairmont Coal 1st 5s.	100	94 1/2	95 1/4
G. B. S. Brewing 1st 4s.	100	40	42
G. B. S. Brewing Inc. 4s.	100	5	7 1/2
Mt. Vernon-Woodbury Cot. Duck 5s.	100	71 1/2	72 1/4
United Elec. Lt. & P. 4 1/2s.	100	85	90

New Bank at Richmond, Va.

A report from Washington says that the Comptroller of the Currency has approved the application for organization of the Star National Bank of Richmond, Va., which will have a capital of \$200,000. The organizers are W. I. Johnson, R. T. Hill, E. C. Burke, P. H. Ford and R. F. Tancil.

FINANCIAL CORPORATIONS.

Ark. Earle.—Bank of Earle reported organized; capital \$50,000; begins business September 1. Officers are: C. T. Whitman, president; Dr. J. M. McBee, vice-president; J. A. Tufts, cashier. The directors are J. Machen, Joe Woods, G. W. Essary, R. C. Vaughan, Dr. C. C. Borum, E. E. Smith, Luther Wallen, J. H. Hammet, all of Earle; R. J. Darne, E. G. Willingham, George O. Friedel, C. R. Ransom, T. J. Clarke, E. E. Goodlander and Max Sondheimer, all of Memphis.

Ark. Lake Village.—Official: Citizens' State Bank of Lake Village incorporated with \$50,000 capital. Begins business September 1. C. M. Matthews is president; F. C. Holland, vice-president; B. L. Ross, cashier.

Ark. Leola.—The Bank of Leola chartered; capital \$10,000, with \$5000 subscribed. Incorporators: J. A. Marsh, president; J. A. West, vice-president; J. E. Wooten, secretary and cashier; J. D. Arnold and R. P. Parson.

Ark. Stuttgart.—The Arkansas County Abstract Co., capital \$10,000, is reported organized; officers are: A. A. Tidball, president; W. N. Carpenter, vice-president; O. M. Young, secretary; T. O. Summers, treasurer.

Fla. Marianna.—Official: Florida Land Title & Trust Co. incorporated; capital \$25,000. A change of name. Begins business September 1. W. A. McKee is president; D. W. McLeod, vice-president, and J. A. Ormond, secretary and treasurer, all at Marianna.

Ga. Atlanta.—Hillyer Trust Co. of Atlanta chartered; capital \$250,000. Incorporators, as previously reported, are Henry Hillyer, William Hurd Hillyer, Charles E. Currier, F. J. Paxon and others.

Ga. Augusta.—Augusta Fire Insurance Co., recently chartered, has organized by electing directors thus: Thomas Barrett, Jr., W. K. Kitchen, F. B. Pope, R. C. Neely, G. H. Nixon, Percy E. May, William H. Barrett, David Slusky, C. G. Goodrich, J. L. O'Dowd, A. S. Hatch, W. S. Morris, William Schweigert, W. E. Bush and D. G. Fogarty.

Ga. Dublin.—The Dublin Banking Co. and the Laurens Banking Co., says a dispatch, have been consolidated with capital of \$75,000, surplus \$78,000 and undivided profits \$10,000. The officers are: President, Charles W. Brantley; active vice-president, James M. Finn; cashier, S. J. Lord; assistant cashier, B. B. Fordham.

Ga. Fitzgerald.—The American State Bank, according to information received, will be chartered with \$50,000 capital to begin business September 1. The incorporators and directors are J. D. Walker of Sparta, Ga.; J. R. Mercer of Dawson, Ga.; P. F. Clark, O. H. Elkins and R. L. Duckworth of Fitzgerald, Ga.

Ga. Marshallville.—The Georgia Banking Co. of Marshallville has applied for a charter. J. C. Walker, A. J. Hamilton and T. S. Taylor are interested.

Ga. Pelham.—Official: The First National Bank of Pelham will be chartered; capital \$40,000. Will begin business early in September. H. H. Merry is president, Isaac A. Bush vice-president and C. G. Lott cashier.

Ga. Savannah.—The Commercial Life Insurance & Casualty Co., capital \$300,000, is reported chartered and will begin business immediately with headquarters in Savannah at Bryan and Drayton Sts. W. W. Williamson is president; M. A. O'Byrne, first vice-president; W. W. Mackall, second vice-president; George T. Hodgson, third vice-president and manager of the insurance department; C. A. Lankford, secretary; A. B. Hull, treasurer; Joseph Hull, chairman of the executive and finance committee, and F. M. Oliver, general counsel.

Ky. Lynn Grove.—Official: The Lynn Grove Bank, capital \$15,000, has been incorporated. It has built a brick banking-house and will begin business September 5. The officers are L. D. Miller, president; C. N. Crawford, M.D., vice-president, and Clinton Jones, cashier.

Ky. Wilmore.—Approved: First National Bank of Wilmore; capital \$25,000. The organizers are Hugh L. McLean, Silas M. Gibson, J. R. Dorman, John McClure and Wm. C. Bryan; will begin business September 15.

La. Hammond.—Official: The Title Guaranty & Realty Co., Ltd., chartered; \$25,000 capital; begins business immediately; directors are Frank E. Neells of Hammond, president; Arthur Loranger of Genesee, vice-president; Samuel L. Hill of Hammond, secretary and treasurer; O. H. Sanders of Amite, H. P. Mitchell of Ponchatoula, V. S. West, Jr., and Columbus Reid of Hammond, La.

La. Hammond.—The directors of the Title Guaranty & Realty Co., Ltd., which will begin business soon in the Bank of Hammond Bldg., are Frank E. Neells, Arthur Loranger,

H. P. Mitchell, I. S. West, Jr., Samuel L. Hill and C. Reid. Mr. Neells, who is president of the Bank of Hammond, is also president of the new company. Mr. Loranger is vice-president and Mr. Hill is secretary-treasurer. Lindsay Hill is acting secretary.

La. New Orleans.—The Underwriters' General Agency Co. of New Orleans is reported organizing with capital of \$25,000 and directors thus: Fred C. Stockdell, president; H. F. Owsley, vice-president; George F. Billings, secretary and treasurer; Robert C. Crump, Benjamin C. Crump, Jr., W. B. Kostmayer, R. B. Fizzell, William Mason Ford, W. R. Lewis and A. J. Mioton.

Miss. Greenville.—Official: East End Savings Bank chartered; capital \$25,000; begins business September 15; incorporators, J. Scott, H. H. Hirsch and B. B. Goldman of Greenville, Miss., and Isidor Scott of New Orleans, La.

Mo., Independence.—The Home Deposit Trust Co. of Independence has begun business. R. W. McCurdy is president, J. Allen Prewitt vice-president and attorney, William A. Symington treasurer and Frederick Bergschneider secretary.

Mo., Joplin.—J. B. Grigg, general manager of the Missouri Miners' Casualty Co., with offices in the Miners' Bank Bldg., is reported as saying that the directors are as follows: C. B. Guinn, W. R. Caulkins, S. K. Orr of Carthage, C. E. Matthews, Thomas McCroskey, Charles Orr, Ben C. Aylor of Webb City, H. C. Murphy, Charles Schifferdecker, H. H. Gregg, F. A. Wilbur and David D. Hoag of Joplin, Mo.

Mo., Kansas City.—Official: American Trust Co., capital \$2,000,000, surplus \$500,000, is being organized with offices in the New York Life Bldg., Kansas City. H. W. Richardson is chairman of the organization committee. Ernest D. Martin and others are also interested. Begins business about November 1.

Mo., Missouri City.—Reported that the Missouri City Banking Co. succeeds the Norton Banking Co.; capital \$20,000. C. G. Shaw is president and E. L. Pigg cashier.

N. C., Chapel Hill.—The People's Bank of Chapel Hill is reported reorganized after dissolution of receivership, and Southgate Jones is cashier. Among the stockholders are Dr. E. V. Howell, Prof. Horace H. Williams and J. D. Webb.

Okla., Oklahoma City.—The Vollers-Fitzpatrick-Laux Abstract & Title Co. of Oklahoma City, capital \$50,000, is reported to have organized with officers thus: Louis J. A. Vollers, president; Lou N. Beadles, vice-president; Frank Laux, secretary and treasurer; King L. Fitzpatrick, attorney, and John J. O'Brien, consulting accountant.

Okla., Oklahoma City.—Official: The Retailers' Fire Insurance Co., organized; capital \$250,000, surplus \$250,000. The directors are S. C. Heyman, president; W. U. Daughdrill, secretary, both of Oklahoma City; B. D. Woods, vice-president, Hydro; J. W. Krueger of Ardmore, R. A. Sweet of Enid, I. C. Montgomery of El Reno, Leon Marx of Pawnee, Kendall Calloway of Chickasha, V. W. Snider of Holdenville, R. L. Caldwell of Tulsa and Arthur Rhoades of Coyle, Okla. J. E. Foster of Oklahoma City is manager. Expected to begin business about March 1, 1911. Headquarters at Oklahoma City.

Okla., Wynnewood.—The First State Bank of Wynnewood, capital \$25,000, is chartered, and may begin business September 1. J. D. Ratson is president, the other directors being George L. Bradford, J. H. Cooper, E. L. Spencer, S. C. Richardson, E. J. Mitchell and Charles F. Smith.

S. C., Chesterfield.—The Manufacturers Record is informed that the Chesterfield Realty & Insurance Co., recently reported in a dispatch as chartered, has been in business for several years.

S. C., Harleyville.—Wilson G. Harvey, president of the Enterprise Bank of Charleston, and T. Moultrie Mordecai are reported to have chartered the Bank of Harleyville; capital \$25,000.

S. C., McClellanville.—Wilson G. Harvey, president of the Enterprise Bank of Charleston, and T. Moultrie Mordecai are reported to have chartered the Bank of McClellanville; capital \$25,000.

S. C., Summerville.—Wilson G. Harvey, president of the Enterprise Bank of Charleston, and T. Moultrie Mordecai are reported to have chartered the Bank of Summerville; capital \$25,000.

S. C., Sumter.—The People's Bank of Sumter, which was recently chartered and which increased its capital stock from \$30,000 to \$40,000 because of oversubscriptions, has again been obliged to increase it, this time to \$50,000, to meet demands for shares. It is to begin business about October 1. The officers are L. D. Jennings, president; B. C.

Wallace, first vice-president; S. W. Stubbs, second vice-president; S. Murray McLeod, cashier.

S. C., Walterboro.—The First National Bank of Walterboro, capital \$25,000, is reported authorized.

Tenn., Clarksville.—Mutual Trust & Loan Co. of Clarksville chartered with \$5000 capital; incorporators, Robert T. Burt, H. R. Merry, N. S. Dabney, N. R. Kimbrough, S. A. Dabney, S. Jefferson, J. A. Tompkins, G. W. Porter, William H. Keese, E. S. Randalis, Ed Williams and Evan Tompkins.

Tenn., Knoxville.—The Tennessee Indemnity Co. to insure live stock has applied for charter; capital \$100,000. Those interested are R. A. Brown, Sam E. Hill, W. D. Jones, C. E. Buckles, John C. Carter, R. B. Layman, Max Agnew and W. A. McCallie.

Tenn., Lynnville.—The Bank of Lynnville is reported organizing under an agreement of stockholders of the First National Bank and the Farmers and Merchants' Bank to consolidate; capital \$30,000. According to a dispatch, John W. Fry will be president and George B. Witt cashier.

Tenn., Theta.—The Theta State Bank, it is reported, will begin business October 1 instead of September 1. B. P. Dalton is president; J. M. Fitzgerald, cashier; J. E. Frimble, vice-president; directors, Charles Mahon, B. A. Beasley, U. J. McKnight, R. Gooch and Thomas H. Taylor.

Tex., Austin.—The Retail Merchants' Association of Texas, according to a report, proposes to organize a mutual fire insurance company. W. M. Morgan of San Antonio is president of the merchants' association.

Tex., Llano.—Llano Real Estate & Investment Co. of Llano chartered; capital \$12,000; incorporators, A. H. Strahle, W. L. Barler and J. B. Hillman.

Tex., Lockhart.—Flowers & McDowell Abstract Co. of Lockhart reported organized by M. O. Flowers and J. E. McDowell.

Tex., Mount Pleasant.—A movement is reported in progress to establish a State bank in Mount Pleasant with \$25,000 capital, and the promoters have rented a building from A. P. Smart, who may be able to give information.

Tex., Lyons.—Official: First State Bank of Lyons chartered; capital \$10,000; began business August 9. J. F. Lyon is president, Mrs. J. W. Wood first vice-president, O. F. Lyon second vice-president and O. A. Schatz cashier.

Tex., San Antonio.—The Equitable Life Insurance Co., capital \$500,000, has been authorized to conduct business, and is expected to open offices about September 1. Frederick J. Combe is president. (See June 23.)

Tex., Thornton.—Farmers' Guarantee State Bank of Thornton chartered; capital \$15,000; incorporators, W. L. Forbes, E. D. Dickey, W. C. Barron and others.

Tex., Travis.—Official: Travis State Bank of Travis, Tex., incorporated; capital \$10,000; began business August 19; directors, Will Rancier, president; O. E. Davidson and J. J. Rouse, vice-presidents; Ruby Moore, cashier, and Ebb Leonard.

Va., Roanoke.—Phoenix Investment Co. reported incorporated for real-estate business; capital \$3000 to \$15,000. Charles A. Ball is president and H. M. Hoomaw secretary.

Tex., Waco.—The Central Texas National Bank of Waco, capital \$300,000, is reported authorized to begin business. W. H. McCullough is president, and other officers also as reported July 14.

Va., Richmond.—The Virginia Southern Securities Corporation of Richmond is chartered; capital \$5000 to \$15,000. F. O. Drummond is president and Irving R. Campbell secretary-treasurer. F. G. Gregory completes the incorporators.

NEW SECURITIES.

Ala., Albertville.—Albertville voted on August 15 the \$25,000 of 5 per cent. 30-year water-works bonds previously reported; denomination \$500 each; dated September 1. W. P. Goodwin is Mayor.

Ala., Hartsells.—An election is reported called for August 22 on \$28,000 of 5 per cent. 20-year water and electric-light bonds.

Ala., Demopolis.—The Marengo County Commissioners have called an election by taxpayers in November for \$175,000 of good-road bonds.

Ala., Mobile.—Only one bid was received, and it was rejected, for the \$117,000 of 5 per cent. 30-year public-works bonds on August 15. They will be readvertised.

Ala., Montgomery.—An official is quoted as saying that the \$100,000 of 5 per cent. 30-year funding bonds offered July 29 were sold at 102.50 to Spitzer & Co. of New York.

Ala., Russellville.—The bonds recently voted. It is reported, are \$3500 school and \$7000 funding 5 per cents.

Ark., Fort Smith.—The Fort Smith and Van Buren Bridge district. It is reported, will sell about October 15 \$625,000 of bonds.

Ark., Morrillton.—\$25,000 of 6 per cent. school bonds are reported to have been recently sold to the Wm. R. Compton Company of St. Louis; denomination \$500.

Fla., Lakeland.—\$18,000 of light and water improvement and \$22,000 of water-main-extension bonds are reported sold to the State of Florida. N. A. Higgins, L. F. Henley and C. W. Heen are bond trustees.

Fla., Port Tampa.—\$25,000 of 5 per cent. 20-year water-works bonds are being offered. R. E. Davis is City Clerk.

Ga., Adel.—\$7500 of water-main-extension bonds are reported voted.

Ga., Americus.—It is contemplated, according to a report, to issue bonds to extend sewers.

Ga., Cordele.—An election is called for September 23 to vote on \$10,000 of O'Neal High School addition bonds.

Ga., Eastman.—The bonds voted August 18 are reported thus: \$30,000 sewer, \$18,000 school, \$10,000 water.

Ga., Eastman.—\$50,000 of town bonds for sewers and school purposes are reported voted August 18.

Ga., Dalton.—All bids are reported to have been rejected for the \$125,000 of 5 per cent. municipal improvement bonds offered on August 10. They will again be offered. Paul B. Trammell is Mayor.

Ga., Franklin.—Election called in Heard county for August 23 on \$40,000 road and \$20,000 bridge 5 per cent. bonds.

Ga., Gainesville.—All bids are reported rejected for the 4 per cent. 30-year bonds offered June 25. They are \$70,000 water-works, \$12,500 sewer, \$12,500 school and \$5000 electric light. R. D. Mitchell is Mayor.

Ga., Sparta.—Official: \$40,000 of 5 per cent. 20-year bonds, dated January 1, 1911, are authorized for water-works and sewerage; denomination \$500 each; date not set for bids. John D. Walker, Mayor, is in charge. W. H. Stansell is City Clerk and Treasurer.

Ga., Waycross.—Reported that a vote will be taken immediately on \$250,000 of 5 per cent. bonds.

Ky., Brooksville.—The Bracken County Fiscal Court is reported to have ordered an election on \$35,000 of 4 per cent. courthouse-building bonds.

Ky., Hyden.—Bids are being received for \$2500 of 6 per cent. 20-year school-building bonds; denomination \$500 each. H. M. Brock is secretary of the Board of Education.

Ky., Newport.—Election called for August 20 on \$4000 school-building addition bonds.

Ky., Winchester.—Bids are being received until 1 P. M. August 30 for \$65,000 of sewer bonds. J. A. Hughes is Mayor and Dr. M. S. Brown chairman of the sewer committee.

La., Greenwood.—Bids will be received. It is reported, for \$24,000 of 6 per cent. 11-20-year drainage bonds of Lake Henry irrigation district; denomination \$500 each. G. W. Holmes is district president.

Ky., Guthrie.—Official: Guthrie Graded Common School district will issue about \$8000 of 5 per cent. 20-year bonds of \$500 denomination to purchase school building and apparatus. Date to receive bids not yet fixed. W. C. Balee is secretary of the School Board.

La., Baton Rouge.—The Governor has approved the bill (says a dispatch) for the issue of \$6,500,000 of bonds for the Panama Exposition, and the issue will be voted on by the people in November.

La., Baton Rouge.—It is contemplated to issue bonds in Baton Rouge and East Baton Rouge parish for a new courthouse and jail, good roads and improved drainage. At a mass-meeting representatives of the country districts declared for the issue only upon condition that one-half of it should be for roads and drainage. The amount is yet undecided. Joseph Gebelin is president of the Police Jury.

La., Slidell.—It is contemplated, according to a report, to issue school and water-works bonds. The City Clerk may be addressed.

Md., Crisfield.—Bids will be received. It is reported, until 2:30 P. M. September 14 for \$15,000 of 4½ per cent. (13½-year average) city bonds. W. Dougherty is City Clerk.

Md., Frederick.—Bids will be received until noon on September 26 for \$75,000 of 4½ per cent. 20-30-year Frederick county bonds; denomination \$100 to \$1000. W. H. Hogarth is president and M. D. Harp clerk of the County Commissioners.

Mo., Fulton.—Bids are being received, it is

reported, until noon August 25 for \$19,000 of heat and repair and \$5000 building 5 per cent. bonds of Fulton school district; denomination \$500. Dr. M. Yates is Treasurer.

Miss., Laurel.—Official notice is given to taxpayers that unless 20 per cent. of their number protest the Mayor and Aldermen will, at their meeting on September 6, order an issue of \$150,000 of bonds to secure the location of the Mississippi Normal College at Laurel.

Miss., Mendenhall.—Reported that the \$7000 of high-school building bonds will not be offered for sale until after September 10.

Miss., Meridian.—Official: \$275,000 of public-improvement bonds, denomination \$1000, rate of interest not yet fixed, have been voted, but not yet issued. C. W. O'Leary is City Clerk. The issue will be used thus: School buildings, \$100,000; new city hall, \$75,000; drainage, \$50,000; fire department, \$15,000; parks, \$15,000; sanitary sewers, \$10,000; sidewalk improvements, \$10,000.

Miss., Meridian.—Official: Bids will be opened September 6 at 2 P. M. for \$200,000 of 5 per cent. good-roads bonds, dated September 1; denomination \$500. The first installment of \$50,000 will mature in 1922 to 1925, inclusive. W. R. Pistole is clerk and J. H. Kennedy president of the board.

Miss., Moss Point.—The \$15,000 of 6 per cent. 20-year street-improvement bonds, denomination \$1000, offered August 2 and not sold, are again being offered. C. M. Fairley is City Clerk.

Miss., New Albany.—Districts 1, 2 and 3 of this (Union) county are reported to have voted bonds for good roads on August 19.

Miss., Osyka.—The city has voted to issue \$20,000 of water-works and electric-light bonds. Clinton Thompson is Mayor.

Mo., Butler.—The \$35,000 of 4½ per cent. 5-20 high-school building bonds offered August 10 were not sold. It is reported, and they are now being offered privately. W. O. Atkeson is secretary of the School Board.

Mo., Springfield.—It is contemplated to vote August 30 on the proposed issue of \$475,000 of bonds described August 18. R. E. Lee is Mayor.

Mo., Kansas City.—Bids are asked until 10 A. M. September 7 for class A bonds, 4 per cents, thus: \$300,000, water works; \$25,000, tuberculosis hospital; \$75,000, contagious-diseases hospital; also for class B bonds, 4½ per cents, thus: \$50,000, market-house; \$50,000, fire protection; \$15,000, public levee; \$25,000, workhouse; \$50,000, paving-repair plant; \$50,000, sewer; \$40,000, 12th St. trafficway; \$100,000, bridge; denomination, \$1000 each; dated September 1; mature in 20 years. Baris A. Brown is Mayor and Gus Pearson City Comptroller.

Okla., Carmen.—Reported that an election will be held August 29 on \$15,000 of water-works and electric-light-extension bonds.

Okla., Calumet.—A dispatch says that \$10,000 of school-house bonds were voted August 18.

Okla., Cushing.—\$25,000 of 6 per cent. 25-year water-works bonds, offered June 20, are reported sold to W. C. Swanwick, Joplin, Mo.

Okla., Durant.—The Dallas Trust and Savings Bank of Dallas, Tex., is reported to have bought the following Durant (Okla.) bonds: \$10,000 of 5 per cent. bridge, \$30,000 of 6 per cent. water-works extension and \$20,000 of 6 per cent. electric light; denomination \$1000.

Okla., Durant.—An election is to be called, according to a dispatch, for vote on \$160,000 of Bryan county courthouse and jail bonds.

Okla., Helena.—Contemplated to call an election for electric light plant bonds.

Okla., Hobart.—Reported that \$102,874 of 6 per cent. improvement bonds have been disposed of at par to the Warren-Quinlan Asphalt Co. in payment for work.

Okla., Oklahoma City.—Reported that another issue of school bonds for \$90,000 is contemplated.

Okla., Krebs.—Reported that \$10,000 of water-main-extension bonds have been voted.

Okla., Konowa.—Bids will be received until 2 P. M. August 27 for \$10,000 of 6 per cent. 10-year improvement bonds; denomination \$1000 each. E. L. Burton is City Clerk.

Okla., Lawton.—Reported that bids will be received by W. J. Julian, City Clerk, until August 24 for \$200,000 reservoir, \$40,000 of water-works and \$40,000 of sewer 5 per cent. 25-year bonds.

Okla., Mannsville.—\$20,000 of water-works bonds are reported to have been voted.

Okla., Oklahoma City.—Ordinance is published for issue of \$5000 of 5 per cent. refunding bonds; denomination \$500; dated August 15.

Okla., Sayre.—An official is quoted as saying that all bids were rejected for the \$70,000 of 5 per cent. 16-year average courthouse and jail bonds of Beckham county offered August 10.

Okla., Yukon.—Bids will be received until Monday, September 5, for \$30,000 of water-works and \$10,000 of sewer 6 per cent. 25-year bonds. H. T. Burson is Mayor.

S. C., Aiken.—The second election for the \$78,000 of waterworks extension bonds held on August 16 resulted in favor of the bonds. J. B. Saller is Mayor.

S. C., Dillon.—Official: The town of Dillon will put on the market within sixty days \$15,000 of bonds for electric lights. Election has been ordered. N. B. Hargrove is Mayor.

S. C., McColl.—A report says that all bids were rejected for the \$20,000 of 5 per cent. 20-year school-building bonds offered August 15.

S. C., St. Matthews.—St. Matthews School District No. 8 of Calhoun county is reported contemplating an issue of \$3000 additional school bonds.

Tenn., Jellico.—The water and sewer bonds to be voted on September 1 aggregate \$90,000.

Tenn., Maryville.—All bids reported rejected for the \$30,000 of 5 per cent. 19½-year school bonds offered July 18. New bids are asked at any time. W. A. McTeer is city recorder.

Tenn., Memphis.—Ordinances are published for three proposed issues of street-improvement bonds. One is to be for \$275,000 and another for \$300,000, both at 4½ per cent.; denomination \$1000 each; dated August 1, 1910, and to run 35 years. It is also proposed to issue \$435,000 of 6 per cent. street-improvement bonds, also dated August 1, 1910; all to be paid off within five years in the proportion of one-fifth each year. J. M. Speed is acting Mayor and E. M. Douglas is City Clerk.

Tex., Alpine.—Official: \$6000 of 5 per cent. 20-year \$500 denomination bonds of common school district No. 3 of Brewster county are being offered for sale at par and interest. Bonds are approved and registered. E. F. Higgins, County Judge, Alpine, Tex., has charge.

Tex., Asherton.—Official: Bond election failed owing to technicality. Another election will be held in November for \$15,000 of 5-20s; may be 5 per cents. of \$100 denomination. Bids will be opened as soon as bonds can be approved; in December at the earliest. J. T. Williams is secretary of the School Board, which will dispose of the securities.

Tex., Austin.—The Attorney-General has approved bonds as follows: \$4000 Wilbarger county school district 15, 5 per cent. 10-20s; \$2000 De Witt county school district 28, 5 per cent. 5-20s; \$1500 De Witt county school district 26, 5 per cent. 10-20s; \$1000 De Witt county school district 41, 5 per cent. 10-20s; \$11,278 Presidio county refunding 5 per cent. 5-20s; \$890 Hopkins county school district 88, 5 per cent. 10-20s; \$800 Hopkins county school district 86, 5 per cent. 10-20s; \$900 Houston county school district 29, 5 per cent. 10-20s; \$1000 Houston county school district 40, 5 per cent. 2-20s; \$10,000 city of Liberty schoolhouse 5 per cent. 5-40s; \$13,500 Lockney independent schoolhouse 5 per cent. 20-40s; \$1300 Glascock county school district 2, 5 per cent. 10-20s; \$800 Houston county school district 1½, 5 per cent. 5-20s; \$1300 Houston county school district 7, 5 per cent. 20s; \$100,000 Galveston seawall improvement bonds, 5 per cent. 20-40s; \$5000 Groesbeck independent school district 5 per cent. 5-40s; \$500 Lavaca county, district 39, schoolhouse bonds, 5 per cents, 5-20s; \$2500 Hardin county schoolhouse 5 per cent. 10-20s; \$1500 district 54 and \$1000 district 68, Tarrant county schoolhouse 5 per cents, 15-year; 800 district 6, Comanche county schoolhouse 5 per cents, 10-year; \$3000 district 11, Limestone county, 5 per cents, 20-year; \$3800 district 5, 5 per cent. 20-40s, and \$3000 district 8, 5 per cent., 15-year, schoolhouse bonds of El Paso county.

Tex., Ballinger.—Election is ordered for September 17 in Road Precinct No. 1 of Runnels county for \$60,000 of road-improvement bonds. It includes Ballinger.

Tex., Bay City.—\$3500 of 5 per cent. 20-year school bonds of this (Matagorda) county are reported registered.

Tex., Beeville.—Precinct No. 8 of Bee county is reported to have voted \$25,000 of road bonds.

Tex., Beeville.—Official: Good-roads bonds in Bee county were voted recently thus: Precinct No. 1, \$100,000; precinct No. 2, \$25,000. County Judge W. W. Dodd will have charge whenever they are issued. Dan Troy is Court Clerk.

Tex., Belton.—\$10,000 of 5 per cent. 20-40 school-building bonds of district 66 in Bell

county are reported sold at par to the Michigan Trust Co. of Grand Rapids, Mich.

Tex., Bryan.—Reported that the \$33,000 of 4 per cent. 20-40-year water, light and sewer bonds offered August 10 were not sold.

Tex., Buckburnett.—The \$16,000 of 10-40 school-buildings bonds offered by Buckburnett independent school district are reported not yet awarded.

Tex., Fannin.—\$12,000 of water-works bonds are reported to have been recently sold.

Tex., Canadian.—Reported that \$5000 of 5 per cent. 20-40-year street-improvement bonds, denomination \$1000, are being offered at par and interest.

Tex., Corpus Christi.—J. T. Sluder of San Antonio is reported to have bought the \$75,000 of 5 per cent. bonds of Corpus Christi independent school district, registered May 5.

Tex., Cooper.—\$8000 of 5 per cent. 20-40-year school bonds are reported sold at par to the sinking fund of this (Delta) county.

Tex., Gainesville.—Reported that the Thos. J. Bolger Company of Chicago was the successful bidder for the \$125,000 of 4 per cent. bonds of Cooke county, and not E. H. Rollins & Sons of Denver and the Austin National Bank as previously reported.

Tex., Grapeland.—Official: Just incorporated for school purposes. Expect to vote on bonds for new building, probably after January 1. George E. Darsey is president of the board.

Tex., Richmond.—\$3000 of school-building bonds are reported sold.

Tex., Marlin.—Official: The report that Falls county has voted \$18,000 of bonds to rebuild Highbank bridge is an error. The Commissioners' Court has only called an election for October 1 on the proposition. W. E. Huncutt is county judge.

Tex., San Marcos.—An election is called for October 18 in Road Precinct No. 1 of Hays county for \$20,000 of road and bridge bonds.

Tex., Sweet Water.—The Commissioners' Court of this (Nolan) county has called an election for September 24 in the road district around Sweet Water to vote on \$100,000 of road improvement bonds.

Tex., Terrell.—Terrell citizens have voted to issue \$10,000 of water and light improvement bonds. A previous election held several months ago was declared illegal because of insufficient notice.

Tex., Tioga.—Official: \$10,000 of 5 per cent. 40-year water-works bonds were voted August 20. J. L. Webb is Mayor.

Tex., Waxahachie.—\$55,000 of road bonds of Ellis county have been approved by the Attorney-General, and they will probably be offered for sale about October 10. They are 5 per cent. 10-40s, and are issued by districts thus: Ennis, \$225,000; Italy, \$105,000; Midlothian, \$85,000; Red Oak, \$70,000; Milford, \$45,000; Maypearl, \$25,000.

Va., Orange.—The \$10,000 of 5 per cent. 15-30-year water-works bonds are reported sold at par to the National Bank of Orange.

Va., Norfolk.—City is reported to have sold at par to J. P. Andre Mottu \$25,000 of 4½ per cent. 30-year improvement bonds, making a total of \$116,000 disposed of out of the issue of \$588,000, \$81,000 having been taken by the sinking fund and \$10,000 were previously reported sold.

Va., Chatham.—\$10,000 of 5 per cent. 30-year street-improvement and school-addition bonds are being offered until September 5; denomination \$500; dated September 1. W. M. Tredway, Jr., is Clerk of Council.

Va., Portsmouth.—Reported that the \$250,000 (total of three issues) of 4½ per cent. 30-year bonds offered without sale on June 30 will probably be again offered about January 1.

Va., Suffolk.—Reported that \$30,000 of refunding bonds are to be issued under a recent ordinance.

W. Va., Keyser.—The \$30,000 of 4½ per cent. water-works improvement bonds are reported sold to the Citizens' Trust & Guaranty Co. of Parkersburg, W. Va., at 106.61.

At Yukon, Okla., bids are being received until Monday, September 5, for \$30,000 of water-works and \$10,000 of sewer 6 per cent. 25-year bonds. Further particulars will be found in the advertising columns.

The Temple Northwestern Railway Co. is offering \$450,000 of 5 per cent. first mortgage gold bonds, registered, on 35 miles of completed railroad out of Temple, Tex. Further particulars will be found in the advertising columns.

At Chatham, Va., bids will be received until September 5 for \$10,000 of 5 per cent. 20-year street improvement and school addition bonds. Further particulars will be found in the advertising columns.

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GENERAL OFFICE

BALTIMORE, MD., 5th August, 1910.

A special meeting of the Stockholders of
 this Company will be held on Friday, the
 fourteenth day of October, 1910, at twelve
 o'clock noon, in the General Office of the
 Company, at the southeast corner of Calvert
 and Center Streets, Baltimore, Md., to con-
 sider and take appropriate action on the
 following subjects in the order named, viz.:
 FIRST: On the approval, or disapproval,
 of the proposed lease of the railway, prop-
 erty, and franchises of The Northern Cen-
 tral Railway Company to The Pennsylvania
 Railroad Company, for 99 years, in the
 form and upon the terms and conditions ap-
 proved by the Directors of each Company.

SECOND: Upon an increase in the Com-
 pany's outstanding capital stock to the ex-
 tent, and for the purposes, recommended in
 the Special Committee's report, as approved
 and adopted by the Board of Directors; and
 also upon any and all questions and matters
 relative to each of the said subjects, and
 any and all action necessary and appropriate
 in connection therewith.

A copy of the Special Committee's report and
 of the action of the Board of Directors
 will be mailed to each Stockholder.

By order of the Board of Directors,
 LEWIS NEILSON,
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\$450,000.00 Five Per Cent.

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These bonds are issued on completed rail-
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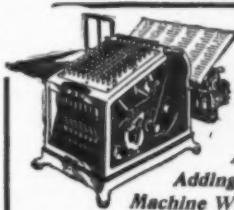
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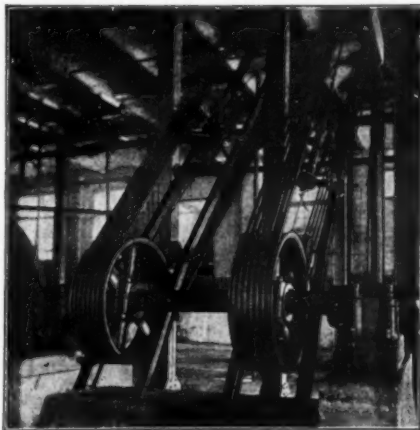
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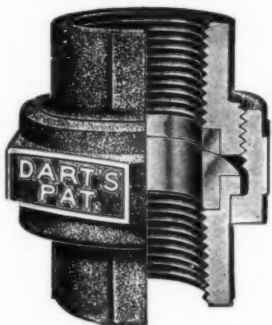
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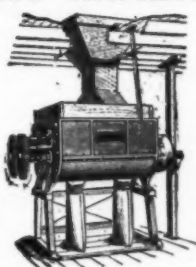
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THE KIRKLAND GOLD MINE, 300 acres of land near Jefferson, S. C., partly developed; also the Little Brewer Gold Mine near Pageland, S. C., partly developed. T. M. Belk, Real Estate Agent, Lancaster, S. C.

TYPEWRITERS

FOR SALE—An Oliver typewriter, No. 5; good as new; has been used only two years, and is in perfect condition; will sell for \$50, immediate sale. N. T. Conn, Franklin, Ky.

LOCATIONS

HERE'S THE PLACE TO LOCATE—AUSTIN, TEXAS.—The city of high wages. The city of active industries. The city where workmen own their homes. The city with famed universities and high-class schools. The city where people live healthy, happy and prosperous. The city that is the center of Texas as well as almost everything. If interested in finding a permanent home and business, where your children will have every educational advantage free while you thrive and prosper, come to Austin, Texas, the city of wealth, health and prosperity. Write Will L. Vining, Secretary Austin Business League, who will gladly answer any inquiries.

INDUSTRIES WANTED

GARMENT FACTORY

ITASCA, situated in the heart of the great black land belt of Texas, wants a garment factory; growing town, with factories and schools. Address Board of Trade, Itasca, Texas.

WHOLESALE QUEENSWARE HOUSE

WHOLESALE QUEENSWARE HOUSE wanted in Texarkana; eight railroad outlets; best distributing point in Southwest for Texas, Louisiana and Arkansas trade; cheapest freight rates. For full particulars address Boosters' Club, Texarkana, Ark.-Tex.

TEXTILE MILL

AN OPPORTUNITY for textile mill men who are able to command capital is presented in East Tennessee in a mill already erected, in which the machinery has recently been overhauled as in first-class condition. This is an opportunity for a moderate investment. Refer to file No. 12,180. M. V. Richards, Land and Industrial Agent, Southern Railway, 1375 Pennsylvania avenue, Washington, D. C.

FURNITURE FACTORIES

FURNITURE FACTORY.—Free site and liberal stock subscriptions for location of furniture factory of any kind. Abundance of raw material and unexcelled transportation facilities. Address Chas. R. Rowe, Secretary Lufkin Progressive League, Lufkin, Texas.

FURNITURE AND CHAIR FACTORY

FURNITURE AND CHAIR MANUFACTURERS.—If you have failed to receive our booklet addressed to you, send for copy; will surprise you what we have to offer. Address Booster's Club, Texarkana, Ark.-Tex.

BOX, CRATE AND VENEER PLANT

BOX, CRATE AND VENEER PLANT wanted; cheap raw material; eight railroad outlets; the heart of Texas, Arkansas and Louisiana is at Texarkana; free factory sites; best distributing point in Southwest to reach States mentioned. For full particulars address Boosters' Club, Texarkana, Ark.-Tex.

GLASS FACTORIES

ATLANTA, TEXAS, WANTS A GLASS FACTORY.—We have an unlimited quantity of glass sand that analyzes over 99 per cent. silica; natural gas in any quantity at satisfactory price; salt and lime manufactured close by; plenty of timber and water and other material; free site, free sand 20 years, exemption from city taxation 10 years, free artesian water to the first factory; transportation and rates all right. Write for full particulars on this and other factory propositions. Great opportunities. Cass County Industrial League, Atlanta, Texas.

BOTTLE, FRUIT JAR AND GLASS PLANTS WANTED.—Glass sands, cheap natural gas, free sites, best distributing point in Southwest, fine climate, is what Texarkana has to offer you. Have just located large window-glass plant, and we want other glass plants of all descriptions. For full particulars and climatic reports address Boosters' Club, Texarkana, Ark.-Tex.

DRUGS AND DRY GOODS

FINE OPENING for wholesale drug business, also wholesale dry goods business; three-fourths of a million people within radius of 100 miles, in a territory only one-fifth developed, but being developed rapidly; first-class shipping facilities; best quality of water, cheap fuel and high-grade citizenship. Address Abilene 25,000 Club, Box No. 537, Abilene, Texas.

WOODWORKING PLANTS

WANTED—A woodworking plant for Mauriceville, Texas, on main line of Kansas City Southern; main line of Frisco; main line Orange & Northwestern, and branch of Santa Fe; 16 miles from Beaumont and 16 miles from deep-water port; will take stock and donate, and factory site. Apply Beaumont Land Corporation, Beaumont, Texas.

OPPORTUNITIES are offered by the city of Houston, Texas, for the profitable operation of a woodenware, tool handle and cooperage factory; unlimited quantity of raw material; adequate labor; magnificent purchasing territory; Houston freight rates on raw material and manufactured products lower than to and from any city in the Southwest; shipments both by rail and water. Write Adolph Boldt, Secretary Houston Business League.

CITIZENS of a good North Carolina town are anxious to get in touch with a thoroughly reliable and capable man who has enough money to take a nominal interest in a woodworking proposition contemplated. The plant will manufacture attractive pieces of furniture to be sold direct to the home. Splendid opportunity for the right man. Refer to file No. 31,203. M. V. Richards, Land and Industrial Agent, Southern Railway, 1375 Pennsylvania avenue, Washington, D. C.

BAY CITY, TEXAS, wants a woodworking plant located there; has unlimited supply of good cottonwood and willow for excelsior, etc.; of fine ash for agricultural handles and for wagons and implements of all kinds, and the best of elm for barrel hoops; has three trunk lines of railway; good churches and schools, and is the center of the rice industry of Texas. If interested, address Ten Thousand Club, Bay City, Texas.

SASH, DOOR AND BLIND FACTORY

SASH, DOOR AND BLIND FACTORY OPPORTUNITY.—Texarkana has a fine opening for an up-to-date sash, door and blind factory. Large window-glass factory just located, to be in operation in a few months. Site can be had adjoining. Local capital can be interested. Cheap labor; cheap lumber; eight railroad outlets; cheapest rate situation for reaching Southwest trade in the Southwest; natural gas for fuel. For full particulars address Boosters' Club, Texarkana, Ark.-Texas.

CIDER AND VINEGAR PLANT

A PRESENT OPPORTUNITY.—On the Danville & Western Railway, in the Patrick county, Virginia, apple district, the yield of fine apples is large. The finest of these apples will stand high in the markets where offered. The large orchards, with their 100,000 or 200,000 trees, offer the finest opportunity for a cider and vinegar plant. There is now no such plant there and nothing to consume the lower grades and culls. A plant which can be put in operation at an early date can make advantageous arrangements. We want to get in touch with a man or firm who will consider the opening. M. V. Richards, Land and Industrial Agent, Southern Railway, 1375 Pennsylvania avenue, Washington, D. C.

MISCELLANEOUS

FREE SITES and concessions on taxes, water and fuel given to factories to locate in McAlester, Oklahoma, the manufacturing city of the Southwest; cotton, fire clay, brick shales, iron, limestone, lumber and many other raw materials. Ask the Commercial Club, McAlester, Oklahoma.

VICTORIA, TEXAS, head of navigation of Guadalupe River; center of cotton, corn, truck and citrus fruit-growing district of South Texas; country rapidly developing; opportunities for many industries. If interested in the coastal section of Texas, write for booklet "D" to the Secretary of the Progressive League.

GET ON GROUND FLOOR IN STAMFORD, TEXAS.—This can be done by investing in property in Stamford. All kinds of business opportunities. An attractive place for manufacturing or jobbing enterprises. Five railroad outlets. Two more soon to be secured. For further information write to The Stamford Commercial Club, Stamford, Texas.

OPPORTUNITY now knocks at your door. The industrial and commercial needs of Texas are great. Let us tell you about them and assist you in locating in the State with a vast future. Wholesale houses and distributors, furniture, brick and cotton manufacturers, ice plants and hotels—these are a few of the thousand opportunities. One million dollars a day of new wealth is coming into Texas to develop the vast empire. Get some of the good things for yourself. We are the clearing-house for all the commercial and industrial information concerning Texas, and we will gladly put our knowledge at your service. Texas Commercial Secretaries' Association, Fort Worth, Texas.

Classified Opportunities

CLINTON, OKLA., wants packing plants, cotton mills, wholesale and jobbing houses of all kinds, manufacturing plants, brick plant, cement plant, sash and door factory, overall factory. Clinton, Okla., offers you first-class shipping facilities; freight rates that will compete with any town in the Middle States territory; best undeveloped jobbing territory in the U. S. today; seven railroad outlets; exemption from municipal taxes, etc. Write Secretary Commercial League.

"TAMPA IS THE TOWN TO TIE TO." Gateway to Gulf; nearest important American port to Panama canal; doubling population every four years; 100 per cent. city of South; big opportunities for investor, manufacturer, homeseeker, tourists' paradise. For literature address W. R. Powell, Secretary Board of Trade, Tampa, Fla.

A TILE FACTORY, soap factory and vinegar and pickle plant would all prosper at Houston, Texas; finest tile clay on the ship channel bank; drainage districts being rapidly formed; material for manufacturing soap at hand with no competition; center of the truck-growing section of Texas; low freight rates in and out bound and good nearby markets. Write Adolph Boldt, Secretary Houston Business League.

QUANAH-QUALITY. City wants wholesale and manufacturing houses. Now have four wholesalers. Jobbers of drugs, dry goods, hardware, badly needed. Has the largest undeveloped trade territory of any city of less than 15,000 people in America. If you are looking for a jobbing center, cast your eyes on Quanah. Also want all kinds manufacturing industries. Three railroads, fourth under construction. Porter A. Whaley, Secretary, Quanah, Texas.

ABILENE, TEXAS, Taylor county, offers to industrial investors one of the best opportunities in the Southwest. It is located in the center of Texas and in the heart of the best agricultural territory in Texas. It is the largest and most central distributing center between Ft. Worth and El Paso. It commands trade from a very rapidly increasing population of 100 miles radius. Fine opening for iron foundry, cotton factory, creamery, culvert factory. For wholesale district this cannot be excelled. Address Abilene 25,000 Club, Abilene, Texas.

MANUFACTURING SITES FREE in the progressive State of Oklahoma. In the town of Arkoma, adjoining Fort Smith, and connected by an electric railway. Water rates free. Shale, natural gas, brick material and pure water. 280 feet higher than Fort Smith. Manufacturers' paradise in the way of cheap materials, Waterway and railway transportation. Rich bottom lands of 2000 acres could be cut up in 20, 30 and 40-acre farms for trucking. In center of the great coal beds of Arkansas and Oklahoma. Within a radius of 250 miles of 22 per cent. of the standing hardwoods of the United States. Town lots for sale. For further information write Hopkins & Murray, 800-803 First National Bank Building, Fort Smith, Arkansas.

COME TO ASHLAND, KY.—Best paved city in U. S.; on Ohio and Big Sandy rivers; five railroads. Ashland wants farmers and fruit growers, wholesale establishments, manufacturers; also pig-iron, steel, black and galvanized sheets, nails, wire products, leather, lumber, fire-brick, red brick and cement block manufactured here. Cheap coal and natural gas. Write Ashland Business Men's Association, Ashland, Ky.

MANUFACTURERS, INVESTORS AND PROSPECTORS will find in Lawton, Oklahoma, an ideal field for investments; free sites for manufacturing establishments on trackage for meritorious industries; a center of remarkable growth; 12,000 population; only eight years old; best water supply in Oklahoma; natural gas; one million dollars being expended in public improvements; fine educational facilities; forty-five miles of uniform concrete sidewalks; five miles of natural Oklahoma rock asphalt paving; splendid railroad facilities; raw material at hand. For further detailed information address L. P. Arnold, Secretary Chamber of Commerce, Lawton, Oklahoma.

JACKSON, TENNESSEE, invites correspondence from manufacturing and industrial concerns, with a view of locating in our city, that employ skilled and unskilled labor. Jackson is one of the prettiest and healthiest cities in the South. Its school system is unsurpassed, and its four great railroads afford unequalled facilities. It is located within the heart of the "Cotton Belt" and is within whispering distance of vast timber tracts and inexhaustible coal and iron resources. Address The Merchants' Association, Robt. S. Fletcher, Jr., Secy., 309 N. Church St., Jackson, Tennessee.

WANTED—Industries of all kinds to locate at Corey, the new model industrial city being built near Birmingham for the employees of the United States Steel Corporation. Water, electric current, coal, railroad facilities all convenient. Railroad frontage at very reasonable prices. Corey has a great future, equal almost to that of Gary, Indiana, and small industries locating there now will have every opportunity for expansion. United States Steel Corporation spending \$11,250,000 at and near Corey. \$1,500,000 to improve Corey being spent. Corey Land Co., 2024 Third Ave., Birmingham, Ala.

MANUFACTURERS' OPPORTUNITY.—Free sites; no taxes; cheap natural gas; cheap coal; abundant water supply; best transportation; good towns; opportunities for manufacture of furniture, woodenware and novelties, glass, tile and pottery, overalls, iron and steel products, carriages, etc. Write Board of Trade, Grafton, W. Va.

FOR INFORMATION about city of Quanah and agricultural, industrial and manufacturing opportunities along the Quanah Route Railway write Quanah Route Asso., Box 180, Quanah, Texas.

HILLSBORO, TEXAS, with 8000 population, the county seat of Hill county with 50,000 people, is 65 miles south of Dallas, 55 miles southeast of Ft. Worth on main line of M. K. & T. R. R. and a division point of said road, on Trinity & Brazos Valley R. R. (Frisco System) and St. Louis & Southwestern R. R. (Cotton Belt). This is the Big 4 country—the cotton, corn, wheat and oat country—the heart of the black waxy belt of Texas. We want a flour mill, another cotton mill, a creamery and a chair factory. For information and if interested write Secretary Board of Trade, Hillsboro, Texas.

TUSCALOOSA, ALABAMA, WANTS INDUSTRIES.—We have an industrial agent in the field, and he will be dispatched to investigate any factory offering its location to us upon a reasonable presentation. We have iron, coal, coke, cotton and every kind of timber peculiar to the South in the greatest abundance. We want genuine applications. be it to move a present plant or to install an entirely new one. We have no dumping ground for out-of-date or worn-out machinery. Address, quick, Tuscaloosa Board of Trade.

ALEXANDRIA, LOUISIANA, situated in the geographical center of the State, with seven railroads and a navigable river, surrounded by magnificent forests of native woods, and in the heart of a splendid agricultural section, offers an ideal location for manufacturing industries. Correspondence solicited. Address Secretary Alexandria Progressive League.

NAVASOTA, TEXAS, the town of great opportunities; railroads radiate in eight directions; sixteen passenger trains daily; six thousand population; navigation to deep water assured; ideal location for factories; abundance of raw material; we want a cotton mill, press-brick plant, packery, and furniture factory; great opportunities for investments in lands, town additions and various enterprises; investors earnestly solicited to personally investigate. They will meet with cordial co-operation. Address J. J. Felder of Business Men's Club, Navasota, Texas.

MANUFACTURING SITES

TO MANUFACTURERS.—Along the line of the Marshall & East Texas Railway you will find plenty of oak and gum which is suitable for the manufacture of any article requiring wood of this nature. Those seeking location for the manufacture of farm implements, furniture, excelsior, egg cases, chicken coops, etc., will do well to investigate before deciding on location, or they can arrange to have their articles manufactured. J. I. Hey, Auditor and Traffic Manager, Marshall & East Texas Railway, Marshall, Texas.

INDUSTRIAL PLANTS FOR SALE

FOUNDRY AND MACHINE SHOP

FOUNDRY AND MACHINE SHOP FOR SALE.—An unusually well equipped foundry and machine shop, located on railroad; will sell whole or controlling interest; owners in other business and cannot give it their attention. Address Wytheville Iron Works, Inc., Wytheville, Va.

IRON AND WIRE FACTORY

FOR SALE—Ornamental iron and wire factory in full operation; brick buildings; foundry; ornamental, wire and structural departments; has furnished work from Maine to Texas; good opportunity for a practical man. Write for particulars. John L. Watson, 309 High St., Portsmouth, Va.

BRICK PLANT

FOR SALE OR LEASE—Up-to-date brick plant modern machinery; 40,000 daily capacity; in southern gas belt of Kansas; gas five cents a thousand. For particulars apply to Werth's Insurance and Financial Corporation, 315 Chestnut St., St. Louis, Mo.

COTTON MILL BUILDING

FOR SALE—Ridgeview Cotton Mills building, two tenement-houses and 16 acres of land; mill building is planned for 3000 spindles and regular mill construction, well ventilated, in a very desirable locality; access to two railroads. For further particulars address L. H. Phillips or J. A. Galther, Newton, N. C.

ICE PLANT AND BOTTLING WORKS

FOR SALE—10-ton ice plant, absorption system cold storage in connection, first-class bottling works, in growing town, good territory, with a splendid outlook for future; reason for selling, other business; a good opportunity. Address Box 5, Newberry, Fla.

FLOUR MILL

FOR SALE—A 60-barrel flour mill, complete; run only a few months; will sell at a bargain; must be sold at once. Reply to Box 98, Bennettsville, S. C.

WOOD MANTEL FACTORY

LOCATED in a Southern city; splendid railroad center; good opportunity for developing an extensive business amongst dealers only factory of its kind in the State; equipment in good order; factory operating right along. Price, including real estate, \$16,000; terms. Address No. 665, care Manufacturers Record.

CHAIR FACTORY

CHAIR FACTORY FOR SALE: attractive proposition. See full advertisement in this paper under date August 18. Address B. M. Cahill, Madison, N. C.

STREET RAILWAY

FOR SALE—Street railway, operating 7 miles track; full equipments; 25 years' franchise. Write to L. B. Raynard, Jr., Pres. Alexandria Electric Railway, Alexandria, La.

MISCELLANEOUS

FOR SALE—Complete plants, Sawmill and timber; planing, sash, door and blind; laundry; glazery; grist mill; tugboats, freight and passenger; gravel dredges; brick plant. J. S. Walton, Pensacola, Fla.

REAL ESTATE: MINERAL AND TIMBER LANDS, WATER-POWERS, ETC.

FOR MANUFACTURING SITES in and around Atlanta and acreage suitable for subdivision, communicate with Coffield Investment Co., 419 Rhodes Building, Atlanta, Ga.

SOUTH GEORGIA AND FLORIDA.—We are now prepared to locate you. Do you want a home? We have it. Do you want a sawmill or turpentine location? We have it. Do you want an investment that will double in a short time? We have it. Try us. Georgia-Florida Land & Investment Co., Tifton, Ga.

W. B. SAUNDERS, 8 Wall St., Atlanta, Ga., real estate, loans and investment property; makes a specialty of investment property. There is no dirt that pays like Atlanta dirt, the half-million city. Also makes a specialty of manufacturing sites. References furnished by the leading firms in this city.

FACTORY SITES, TRUCK AND FARM LANDS.—We will furnish factory sites for any purpose; truck land; any size to suit purchaser; farm lands of all kinds and any size tracts, improved or unimproved, in Jefferson county, Texas, the garden spot of the earth. Write us. Beaumont Land & Building Co., Beaumont, Texas.

WRITE today for literature giving complete information about Plant City, right under the wings of the twenty-seven-million-dollar Southern Iron & Steel Company plant located in Greater Gadsden.

Plant City is four weeks old. One hundred lots sold the first ten days; seven homes now being erected; five hundred more needed to accommodate the five thousand workmen coming in daily to work at the steel plant.

Plant City will be a town of five to ten thousand people in the next eighteen months. If you want to get in on the ground floor, we have the best proposition in the South. Don't fail to write for information. Gadsden Land & Development Co., Birmingham, Ala.

IF YOU wish to buy or sell real estate of any kind, anywhere, timber lands, farming lands, fruit lands, tracts for subdivisions, mining property, city property, or any kind of business, write me. Address F. L. Thomas, Real Estate, 3260 River Road, Columbus, Ga.

CLENDENING & THOMAS, Real Estate Agents, Round Hill, Va. Large list of farm and town property for sale in the famous Loudoun Valley. Send for descriptive catalogue and price-list.

COPPER AND WHITE TALC PROPERTY

I HAVE 2337 acres of mineral property, rich with copper and white talc ore, situated between two proven copper mines; railroad touching the property and river very close; would be glad to give full description of property and analysis of adjoining mine ore to anyone interested. I want to sell one-half interest and start working the property. Address "B," Station A, Richmond, Va.

COAL AND TIMBER LANDS

COAL LAND FOR SALE.—4500 acres in one body in Morgan county, Tennessee. This is one of the largest single bodies of coal land that can be purchased in Tennessee. The coal reports made by efficient engineers show this to be one of the highest-grade coal-mining propositions in the South. The property adjoins the State of Tennessee's coal properties for five miles. The State is operating their mines on very large paying scale, and this 4500 acres carry the same quantity and quality of coal as that gotten out by the State of Tennessee. There are several million feet of hardwood timber on the tract. We will be very glad to hear from parties looking for a very high-grade coal-mining property, and all inquiries will be given our prompt attention. For price and terms address the undersigned owners. R. T. & H. M. Wilson, 216 Sixth Ave. N., Nashville, Tenn.

TWENTY-FIVE-THOUSAND-ACRE boundary line coal and virgin timber in Eastern Kentucky; \$16.50. Jo A. Parker, Parma, Mo.

MINERAL AND TIMBER LANDS

VALUABLE PINE AND HARDWOOD TIMBER LANDS.—We have several valuable tracts of pine and hardwood timber lands for sale. Full description, price and terms will be furnished on application. Write us if interested. J. B. Coburn Real Estate & Ins. Co., Birmingham, Ala.

TIMBER FOR SALE

10,000 ACRES choice virgin timber in Raleigh Co., W. Va.; 30 to 40 per cent. poplar, basswood, oak, hemlock, chestnut, etc.; 2½ miles from Virginian and C. & O. Ry. Address Owner, Box 218, Hinton, W. Va.

FOR SALE—2900 acres hardwood stumpage; cut 6000 ft.; 25% each of oak, cottonwood and gum; balance ash, poplar, hickory, etc.; 2 miles from R. R.; will sell as a whole or part; easy terms; price right. Address "Owner," Box 4, Columbus, Miss.

FOR SALE—250,000,000 feet of Southern yellow-pine timber with ample time for removal, and well-equipped sawmill and tramroads, now in operation. Address No. 684, care Manufacturers Record.

FOR SALE—240-acre farm; 10 miles Knoxville; near school, church and railroad station; 160 acres cultivated; balance in timber. For particulars, etc., address owner, Will D. Reams, R. P. C., Bristol, Tenn.

IN SUGARLAND DISTRICT.—2000 acres, one-half prairie, balance timber, traversed by Oyster Creek; 350 acres in cultivation; mile from railroad; easy terms. D. R. Pearson, Richmond, Texas.

FOR SALE—3,000,000 feet timber, pine, poplar, oak and hickory, on L. & N. R. 3¼ miles Polk county, Tenn. For particulars address D. A. McKinzie, Riceville, Tenn. R. R. 2, Box 20.

STUMPAGE FOR SALE

FOR SALE—About three million feet high-grade hardwood stumpage, close to railroad, in Butler county, Mo.; \$5000; reasonable terms. Jo A. Parker, Parma, Mo.

FARM AND TIMBER LANDS

\$10 VS. \$30.—You need not pay \$30 per acre for land remote from transportation, with all the timber stripped off and not in the arable belt of Manatee county. It would pay you better to select richer land within the arable belt and located on rail and water transportation. I have the land at \$10 per acre. See me and the land. John W. Jackson, Palmetto, Fla.

FOR SALE—1500 acres virgin timber land in Mississippi delta; well timbered with oak and cypress; land very fertile; \$15 per acre; a bargain. F. A. Critz, West Point, Miss.

FOR SALE—1700 acres of land in lower South Carolina; about seven hundred acres open land; balance in timber and lowland. Apply Box 226, Camden, S. C.

A GREAT BARGAIN—ARKANSAS FRUIT AND STOCK FARM.—200 acres, 8 miles from Waldron, county-seat and good town, on the Kansas City Southern Railroad; 50 acres in cultivation; 3 acres in meadow; large orchard; fine garden; small 3-room house and outbuildings; fine water; all land not tilled is covered with fine pine and oak timber. This is a fine fruit and stock farm; the range cannot be beaten in the county; enough range for 1000 head of stock; stock water in abundance. This place can be bought now for only \$1000 on easy terms. This is a very healthy country, with plenty of good schools and churches. Write or call at once. I have other bargains. John D. Baker, Waldron, Scott Co., Arkansas.

FARM AND OUTFIT.—579 acres, 300 under cultivation, 40 meadow, 75 woods, 164 open and second-growth pine; 9 mules, wagons, agricultural tools, complete; \$16,300; rents for 10% on this value; possession given December 1. P. O. Box 138, Covington, Georgia.

Classified Opportunities

[CONTINUED FROM PAGE 73.]

67 MILLION FEET OF HARDWOOD TIMBER on 10,000 acres of land on Trinity River, Houston county, Tex. The timber is of the following varieties: White oak and its specie, pin oak, ash, pecan and elm; half in prairie land, suitable for farming and which has no superior; 1000 acres of it is in state of cultivation, and all of it under wire fence and cross-fenced. This is used as hog and cattle ranch at present. Price \$12.50 an acre; one-third cash, balance from one to five years, with 7 per cent. interest. Address H. J. Arledge, Crockett, Tex.

TIMBER AND FARMS FOR SALE.—1066 acres good agricultural lands, well improved, two miles good town; ten plows in operation; price \$10 acre. 60,000 acres hardwood in Louisiana, extra fine agricultural lands; will cut 300,000,000 feet; price \$8 acre; easy terms. Southern Land Co., Americus, Ga.

FARM AND TRUCK LANDS

GOOD LAND! CHEAP LAND! In the East Panhandle of Texas; adapted to wheat, corn, alfalfa, fruit and stock raising; nice hay meadows; pure shallow water; abundant rainfall; investigate. East Panhandle Land Co., Mobeetie, Texas.

FOR SALE.—Country home, 60 acres, near Houston; modern conveniences; equipped for combination truck, chicken and stock farming; fine climate for outdoor life; best country place in county. Box 51, R. R. 4, Houston, Tex.

CALEBA, Shelby County, Alabama.—Farming, fruit and dairy lands for sale; acreage and terms to suit the purchaser; great opportunities for manufacturing; best limestone in the world; excellent R. R. facilities. A. P. R. Iahli, Calera, Ala., Agent for J. W. Dimmick.

OKLAHOMA.—320-acre farm, 5 miles Covington, Okla.; 160 acres in cultivation; good improvements; orchard, vineyard, alfalfa; good water; 1/4 mile to German church; school-house on farm; \$8500; can give terms; be quick; this is a bargain; will not be on market long at this price. Childers Bros., Covington, Okla.

FOR SALE.—10 acres, two miles from court-house, Bay City; fine black prairie land, adapted to oranges, figs or truck; thrifty men or women who wish to save and get ahead can profit by putting their savings in this imperishable and rapidly advancing security; \$25 down; that's all; \$15 per month. Surely, it's easy. Write Bay City Realty Co., Bay City, Texas.

TAMPANIA FIVE-ACRE FARMS.—A glittering Tampa investment; ideal for suburban homes, truck farms and poultry ranches; located on "Old Tampa Bay," 15 minutes from the business center of Tampa; fertile soil; flowing wells; splendid paved road; 60-foot streets around each ten-acre tract; salt water fishing and bathing; three crops can be grown yearly; adapted to cabbage, lettuce, strawberries, potatoes, melons, egg-plant and all staple crops. The Tampa autoists have just secured an adjoining 100-acre tract for golf links, and in addition raised \$10,000 with which to build and furnish a modern clubhouse. \$40,000 Tampa farms already sold. Prices sure to advance. Price, \$1000 for five acres; \$100 cash; balance \$15 monthly for 60 months; no interest. Booklet, maps and full information. The Mutual Realty & Investment Co., 201 Madison street, Tampa, Fla.

WHEN YOU WANT TO BUY ALABAMA farm lands write to Calhoun Farm Land Co., Box 703, Anniston, Alabama.

A BARGAIN TO BE HAD.—I own (no agent) 20,000 acres of A-1 cut-over upland in North Louisiana. This land will be sold at a price which will net the investor 100% in less than five years. Write for particulars and price. Jas. Gould, Pine Bluff, Ark.

VIRGINIA FRUIT FARM of 11,800 trees, 75 per cent. apples, 15 per cent. peaches and 10 per cent. of pears and other fruit; 550 acres of good land in the famous Albemarle poppin belt (Floyd county); all trees from 10 to 22 years old. Price in fee, \$30 per acre. Write for photographs. Thomas, Craig & Upson, Roanoke, Va.

MISSOURI FARM FOR SALE.—361 acres, 200 in cultivation; bottom land, clear of stones, level; good stock water and well water; good out range for stock; two good bearing orchards; two good dwelling-houses, one tenant-house, two excellent barns; all of this land is good for corn and grass; farm situated four miles north of Iron Mountain & Southern Railroad; three miles of W. G. & St. L. R. R.; five miles good town; public road runs by farm; rural mail; phone in each house; price \$35 per acre; located 148 miles south of St. Louis; good school and churches; in fact, there is two sets of good improvements on this farm, and it has never been offered for sale before; will take deed of trust back for half purchase price on as long time as purchaser may desire, with 6 per cent. interest. M. M. Sheets, Williamsville, Mo.

WEST TENNESSEE LAND FOR SALE.—Come to West Tennessee and buy land, where it is good and cheap, and where you can pay for it on terms. We have on sale some extra bargains. Write for an illustrated booklet. Trenton Land Co., Trenton, Tenn.

MONEY WANTED

7%, secured by first mortgage bonds, will be paid by a successful going manufacturing company, located in the South, for \$15,000 to \$20,000. Address No. 662, care Manufacturers Record.

MACHINERY AND EQUIPMENT

FIVE PORTABLE CIRCULAR-SAW MILLS for sale; complete with all saws, cars, etc., just as we are running them; range from 20 H. P. Frick to 35 H. P. Wheland. W. M. Ritter Lumber Co., Franklin, N. C.

PATENT ATTORNEYS

EUGENE C. BROWN, ENGINEER and Patent Lawyer, Suite 40 Victor Bldg., Washington, D. C., Member Bar U. S. Supreme Court. Mr. Brown is especially qualified to prosecute cases in Patent Office and patent litigation from both engineering and legal standpoints, having been examiner in U. S. Patent Office for nine years. Send sketch for advice.

EXPERT INVESTIGATIONS of prior art, validity and infringement of patents. Address Hubert E. Peck, Patent Attorney, 629 F St. N. W., Washington, D. C. Established 1895.

PATENTS OBTAINED OR NO CHARGE MADE.—Easy payments; 15 years official examiner U. S. Patent Office; over quarter century actual experience; unexcelled facilities; highest references; patents advertised for sale free. Send sketch of invention for free search U. S. Patent Office records and reliable report as to patentability; also for beautifully illustrated inventors' guide book and "How and What to Invent." E. P. Bunyea Co., Washington, D. C.

PATENTS THAT PROTECT.—Our three books for inventors mailed on receipt of 6c. stamps. R. S. & A. B. Lacey, Dept. 14, Washington, D. C. Estab. 1869.

PATENT YOUR IDEAS.—\$100,000 offered for one invention, \$5500 for another; book, "How to Obtain a Patent" and "What to Invent," sent free; send rough sketch for free report as to patentability; patent obtained or fee returned. We advertise your patent for sale at our expense. Chandice & Chandice, patent attorneys, 978 F street, Washington, D. C.

PATENTS Secured or Fee Returned. Send sketch for free report as to patentability. Guide book and what to invent, with valuable list of inventions wanted, sent free; \$1,000,000 offered for one invention; \$16,000 for others. Patents secured by us advertised free in World's Progress; sample free. Victor J. Evans & Co., Washington, D. C.

PATENTS FOR SALE

WE HAVE recently secured the following patents. Address all communications to Sales Dept., Victor J. Evans & Co., Washington, D. C.: Morris L. Silverstein, detachable leather heels; John H. Pence, water vessels; Virgil A. Jenks, trucks; Alphonse Rutsch, internal-combustion engines; Minnie M. Dickinson, devices for cooking asparagus; Zachariah C. Ferris, water-gauge attachments; Vincent C. De Ybarro, paper clips; Jas. H. Dunstan, combination tools; Eli Dillabaugh, whip racks; Jas. L. Blair, trolley safety locks; Jos. L. Bowman, hay stackers; Wm. T. Bennett, pipe wrenches; Thos. Herbig, handsaw blowers and hangers; John R. Vinsant, machines for molding building blocks; Jas. T. Underwood, egg openers; Scott F. Sultzbaugh, dinner pails; Rosa Brown, cow milkers; John K. F. Ruck, ladder scaffolds; Frank M. Hilgert, trousers supporters; John W. Williamson, combined railroad tie and rail fastener; Thos. B. Rankin, door-releasing mechanism; Samuel Richardson, road scrapers.

CHANGEABLE GEAR for bicycles; low, medium or high speed gear immediately available; simple and inexpensive; the only real bicycle improvement in years. Prospective purchasers address, for drawing, J. M. Fleming, 511 Hayne street, Pensacola, Fla.

INHERENT STRENGTH OF AMERICA.

Our country has 90,000,000 inhabitants dominated by a spirit of enterprise and energy surpassed by that of no other people on earth.

American mills, factories, foundries, machine shops and other manufacturing industries are turning out annually goods to the value of \$20,000,000,000.

American farms and plantations and gardens and ranges are producing grain, cotton, hay, tobacco, rice, sugar, fruits and vegetables, live stock and poultry to the value of \$8,000,000,000 or \$9,000,000,000 annually.

From the earth Americans are bringing annually coal, iron-ore, phosphate rock, oil, sulphur, natural gas, gold and silver, copper, zinc and lead, marbles and granites and other minerals to the value of \$2,000,000,000.

Our forests are yielding in lumber, naval stores, firewood, etc., \$1,000,000,000 every year.

Before a man permits himself to get into a state of mind that will offer lodgments for the microbes of pessimism he should consider these facts.

PROPOSALS

PUBLIC BUILDINGS.

CONSTRUCTION BONDS.

MISCELLANEOUS.

GOVERNMENT PROPOSALS

PROPOSALS FOR OXY-ACETYLENE Welding and Cutting Plant, Cold-rolled Steel, Bronze, Driftbolts, Copper Gaskets, Lock Washers, Screws, Valves, Cocks, Steam Whistles, Water Gauges, Water-gauge Glasses, Hose Nozzles, Pipefittings, Slip Scrapers, Chain Blocks, Grindstones, Saws, Vises, Peavies, Cold Chisels, Reamers, Foundry Brushes, Horse Brushes, Headlight Burners, Lantern Globes, Door Catches, Buckles, Cups, Steel Tapes, Rules, Twine, Rubber Valves, Engine Oil, Coke, etc. Sealed proposals will be received at the office of the General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 10:30 A. M. September 9, 1910, at which time they will be opened in public, for furnishing the above-mentioned articles. Blanks and general information relating to this Circular (No. 691) may be obtained from this office or the offices of the Assistant Purchasing Agents, 24 State Street, New York City; 55 National Realty Building, New Orleans, La.; and 1086 North Point Street, San Francisco, Cal.; also from the U. S. Engineer Offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Md.; Philadelphia, Pa.; Pittsburgh, Pa.; Boston, Mass.; Buffalo, N. Y.; Cleveland, Ohio; Cincinnati, Ohio; Chicago, Ill.; St. Louis, Mo.; Detroit, Mich.; Milwaukee, Wis.; St. Paul, Minn.; Chattanooga, Tenn.; Louisville, Ky.; Mobile, Ala.; and Galveston, Tex.; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill.; and Chamber of Commerce and Board of Trade, Tacoma, Wash. F. C. BOGGS, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

DEPARTMENT OF THE INTERIOR. Washington, D. C., August 12, 1910. Sealed proposals in duplicate will be received at this Department until 2 o'clock P. M. Thursday, August 25, 1910, and then opened, for the extension of a vacuum heating system to the Pension Office Building, and the construction of a concrete trench from the intersection of the tunnel connecting the Old Postoffice and Patent Office Buildings to the Pension Office Building, to be used in connection with the extension of such heating system, in accordance with specifications and drawings, copies of which may be obtained upon application to the Chief Clerk of this Department. A certified check in the sum of \$15 will be required to insure the safe return of the drawings. The right is reserved to reject any or all bids, waive technical defects, accept one part and reject the other, as the interest of the Government may require. Proposals must be securely enveloped and marked "Proposal for Installation of Vacuum Heating System for the Pension Office Building" or "Construction of Concrete Trench to the Pension Office Building," as the case may be. FRANK PIERCE, Acting Secretary.

DEPARTMENT OF THE INTERIOR. Washington, D. C., August 18, 1910. Sealed proposals in duplicate will be received at the Department until 2 o'clock P. M. Monday, September 12, 1910, for the installation of a vacuum-heating system for the Freedmen's Hospital and Howard University buildings in Washington, D. C., in accordance with drawings and specifications, copies of which, with the form of proposal, may be had on application at the Department. A certified check for the sum of \$50 will be required as a guaranty for the safe return of the plans loaned. The right is reserved to reject any or all bids, waive technical defects, accept one part and reject the other, as the interests of the Government may require. Proposals to be securely enveloped, marked "Proposal for Vacuum Heating System Freedmen's Hospital and Howard University," and to be addressed to the Secretary of the Interior. JESSE E. WILSON, Assistant Secretary.

SEALED PROPOSALS will be received at this office up to two o'clock P. M. on August 31, 1910, and then opened and forwarded to the Secretary of Commerce and Labor, Washington, D. C., for final disposition, for furnishing all the labor and materials involved in the construction of the United States Reinforced Concrete Immigration Station Building on Pelican Spit, in Galveston Harbor, in accordance with drawings and specifications, copies of which may be obtained from the Architect, Geo. B. Stowe, Galveston, Texas, at his discretion. ALFRED HAMPTON, Inspector in Charge, Immigration Service, Galveston, Texas.

U. S. ENGINEER OFFICE, Jacksonville, Fla., Aug. 4, 1910. Sealed proposals for dredging in Hillsboro Bay, Fla., will be received at this office until 12 o'clock noon Tuesday, September 6, 1910, and then publicly opened. Information on application. GEO. R. SPALDING, Capt., Engrs.

U. S. ENGINEER OFFICE, Jacksonville, Fla., August 6, 1910. Sealed proposals for rock excavation in St. Johns River, Florida, opposite the City of Jacksonville, will be received at this office until 12 o'clock noon September 8, 1910, and then publicly opened. Information on application. GEO. R. SPALDING, Capt., Engrs.

U. S. ENGINEER OFFICE, Jacksonville, Fla., August 6, 1910. Sealed proposals for furnishing material and raising and building training walls, dams and shore protection in St. Johns River, Florida, will be received at this office until 12 o'clock M. September 7, 1910, and then publicly opened. Information on application. GEO. R. SPALDING, Capt., Engrs.

U. S. ENGINEER OFFICE, Montgomery, Ala., August 17, 1910. Sealed proposals for dredging channel from Apalachicola River to Saint Andrews Bay, Fla., will be received at this office until 1 o'clock P. M. September 16, 1910, and then publicly opened. Information on application. H. B. FERGUSON, Capt., Engrs.

U. S. ENGINEER OFFICE, Montgomery, Ala., August 17, 1910. Sealed proposals for dredging at entrance to Saint Andrews Bay, Fla., will be received at this office until 1 o'clock P. M. September 16, 1910, and then publicly opened. Information on application. H. B. FERGUSON, Capt., Engrs.

ENGINEER OFFICE, U. S. Army, Mobile, Ala., August 5, 1910. Sealed proposals for building lock and dam No. 17 and lock tender's house, Black Warrior River, Alabama, will be received at this office until 11 o'clock A. M. September 7, 1910, and then publicly opened. Information on application. H. JERVEY, Major, Engineers.

U. S. ENGINEER OFFICE, 920 17th St. N. W., Washington, D. C., August 4, 1910. Sealed proposals for furnishing and placing riprap or cobblestones on the seawall, Anacostia River, D. C., and for constructing and repairing jetties in Occoquan, Nominal and Urbana Creeks and Milford Haven, Va., will be received here until 12 M. September 3, 1910, and then publicly opened. Information on application. W. C. LANGFITT, Lt. Col., Engrs.

U. S. ENGINEER OFFICE, Mobile, Ala., August 23, 1910. Sealed proposals for dredging in harbor at Mobile, Ala., will be received at this office until 11 A. M. September 22, 1910, and then publicly opened. Information on application. H. JERVEY, Major, Engineers.

NEW BOND OFFERINGS

Bonds for Sale

The City of Coleman, Texas, now has ready for delivery \$20,000 worth of Electric-Light Improvement Bonds, dated July 1, 1910, 5-40s, bearing 5 per cent. interest; interest payable semi-annually. Write for financial statement and other particulars to F. A. DIBRELL, City Sec., Coleman, Texas.

Sale of Bonds

Bids will be received for next thirty days for \$40,000 twenty-year "Courthouse Bonds" County of Dillon, South Carolina, issued to aid in building Courthouse and Jail, pursuant to Act of General Assembly of said State, regular session, 1910, and authorized by vote of qualified electors of the county; bear interest at rate of 4% per annum, payable semi-annually on 1st April and October of each year. Dillon county has assessed value of property of about \$4,000,000 (about 25% of actual value); has no other bonded or other indebtedness, except for current expense, and is one of the most prosperous and progressive counties in the South.

Address all communications to J. H. DAVID, Secretary Courthouse Commission, Dillon, S. C. August 1, 1910.

\$25,000 School Bonds

The Lakeside Special School District of Chicot County, Ark., will float \$25,000 school bonds, to run for twenty-five years, for the purpose of adding to and erecting new buildings. The district is in first-class shape, the revenue derived this year being over \$14,000. Is one of the largest and best districts in the State. Will want to redeem one bond or pay \$1000 each year, besides paying interest semi-annually. These are first-class bonds, and all parties who are interested address William Kirten, Lake Village, Arkansas.

Water-Works and Sewer Bonds

Sealed bids will be received by the Town Council Monday, September 5, 1910, for the sale of \$30,000 Water-works and \$10,000 Sewer 6 per cent. 25-year Bonds. Bids to be accompanied by a certified check for 2 per cent. of the amount. Right reserved to reject any and all bids. Address H. T. Burson, Mayor, or M. R. Belisle, Town Clerk, Yukon, Okla.

Sale of \$10,000.00 5% Municipal Street Improvement and School Addition Bonds.

CHATHAM, VIRGINIA. Sealed bids will be received by the undersigned until Monday, September 5, 1910, noon, for the purchase of twenty 5 per cent. \$500 coupon bonds, dated September 1, 1910. Interest payable semi-annually on March and September first. Bonds to run 30 years. Certified check for 5 per cent. par value of bonds required with proposal. Council will open bids September 5, and reserves right to reject any or all bids. Cash required on delivery of bonds. Address WM. M. TREDWAY, JR., Clerk of Council.

SEWERS

To Sewer Contractors

Sealed proposals on blank forms furnished by the city and addressed to the Chairman of the Board of Paving and Sewer Commission, Greenville, S. C., will be received until 1 P. M. September 10, 1910, for furnishing all material and labor for the construction of Sanitary Sewer Extensions at Greenville, S. C., as per plans and specifications adopted. The work will consist of approximately 6 miles of pipe sewers 8 inches in diameter. Each bid must be accompanied by a certified check made payable to the Chairman for one thousand (\$1000) dollars.

The right is reserved to reject any or all bids. Plans and specifications can be seen at the office of the City Engineer at Greenville, S. C., and specifications will be mailed upon request. Paving and Sewer Commissioners:

W. E. BEATTIE, Chairman;
W. C. CLEVELAND,
W. C. GIBSON.
C. P. BALLENGER,
City Engineer.

Sewer Construction

OFFICE OF THE COMMISSIONERS OF SEWERAGE OF LOUISVILLE, KY. Incorporated.

Sealed proposals for the construction of Section "F" Beargrass Interceptor, Contract No. 73, will be received at the office of the Commissioners of Sewerage, 905 Equitable Building, Louisville, Ky., until 12 o'clock noon September 2, 1910.

The work consists mainly of the construction of about 940 ft. of 39" reinforced concrete sewer, 1729 ft. of 33" plain concrete sewer; 2543 ft. of earth excavation, maximum cut 23.5 ft., minimum cut 9.5 ft., average cut about 21.2 ft.; about 640 cu. yds. concrete and about 25,000 lbs. of steel.

Sealed bids should be endorsed "Proposal for Section 'F' Beargrass Interceptor," and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by a certified check for at least seven per cent. (7%) of the total amount of the bid, or a "bidder's bond," as described in the form of proposal.

Plans and specifications may be seen at the office of Harrison P. Eddy, Consulting Engineer, 14 Beacon St., Boston, Mass., or at the office of the Commissioners of Sewerage.

P. L. ATHERTON, Chairman.
CHAS. P. WEAVER, Secy. and Treas.
J. B. F. BREED, Chief Engineer.

MISCELLANEOUS

Water-Works and Electric-Light Plants

On the 6th day of September, 1910, bids will be received and publicly opened at 8 P. M. by Hon. M. C. Main, Mayor, at Arapaho, Oklahoma, for the purchase by the city of all material required in the construction of a system of Water-works and Electric Lights. Lists of material and quantities can be had by addressing the City Clerk, Fred B. Gallion, Arapaho, Okla., or the O'Neil Engineering Co., 1503-8 Praetorian Bldg., Dallas, Tex.

Hotel Construction

NOTICE TO CONTRACTORS.

Tulsa Building Company will submit plans and specifications for ten-story hotel in Tulsa, Okla., September 1, 1910. Contractors desiring to figure can secure the same by forwarding with application certified check for \$25 to assure return. All bids must be accompanied by certified check for \$10,000. Successful bidder will be required to furnish bond for \$100,000. Bids opened 12 o'clock noon September 20, 1910, at office of secretary. Right reserved to reject any and all bids. C. B. LYNCH, Secy., Tulsa, Okla.

Paving

Sealed proposals will be received by the Mayor of town of Whiteville, N. C., until 2 o'clock P. M. September 15, 1910, for furnishing all material, machinery and building approximately 12,000 square yards of street in said town.

Profile will be on exhibition at the Mayor's office, or a copy of same will be furnished upon receipt of \$1.

The Board of Aldermen reserves the right to reject any or all bids. Each bid must be accompanied by a certified check for \$500. W. ROSS DAVIS, Mayor. W. E. MacDANIEL, Secretary.

Iberia and St. Mary Drainage District

Sealed proposals will be received by Board of Commissioners and opened September 14 at their Olvier office for Drainage Excavation Canal Work to the amount of 111,000 cubic yards.

For full particulars address H. N. PHARR, Chairman Sub-Com. N. I. and St. Mary Drainage District, Olvier, La.

Notice of Contract Erection Water Tower Tank, Etc.

Sealed bids will be received by the Board of Supervisors of Greene County, Miss., up to 12 o'clock noon on the 5th day, the 1st Monday of September, 1910, for the purpose of erecting and constructing of Water Tank and Tower, Gasoline Engine, Pump and Lumphouse, and all necessary piping and fixtures, for the use of the County Jail for sanitary purposes, as per plans and specifications on file in the clerk's office at Leakesville. A certified check to amount of \$100 will be required of each bidder as a guaranty that he will enter into bond and contract in accordance with his bid. Parties contracting will be required to furnish all material for completion of said work. The Board reserves the right to reject any and all bids. The contract will be let to the lowest bidder. By order of Board of Supervisors Greene County, Miss. This August 3, 1910.

S. R. McKAY, Clerk.

Water Mains, Fire Hydrants, Etc.

Tarboro, N. C., August 19, 1910. Sealed bids will be received at the office of City Clerk, Tarboro, N. C., until September 1, 1910, 8 P. M., for furnishing approximately 180 tons 6-inch and 120 tons 8-inch standard iron pipe for water mains; also about 6 tons specials, 22 double fire hydrants and lead and gaskets.

For particulars address JNO. A. WEDDELL, Clerk Town of Tarboro. P. S.—In making your bids please state the earliest delivery you can make.

Notice to Architects

(COMPETITION.)

The Confederate Memorial Association has instructed its Executive Committee to receive competitive plans for a memorial building in Richmond, Va., to be known as the "Confederate Memorial Institute." The Committee has engaged a firm of architects to act as expert advisers in the preparation and award of the competition.

Cost of building to be \$150,000. Prizes ranging from \$1000 to \$200. Architects desiring to compete should apply for conditions of competition on or before September 30, 1910, to

HON. J. TAYLOR ELLYSON, President Confederate Memorial Association, Richmond, Virginia.

Proposals for Constructing Water-Works and Electric-Light System

Sealed proposals will be received by the Mayor and Council of Opelika, Ala., until 12 noon August 31, 1910, for furnishing all material, machinery and constructing a complete Water-works and Electric-Lighting System in and for the city of Opelika, Ala. Plans may be seen at the office of the City Clerk or the Engineers, and specifications may be obtained from either.

The right is reserved to accept or reject any or all bids.

L. F. DICKSON, Mayor. THE J. B. McCARRY CO., Engineers, 1311-15 Empire Building, Atlanta, Ga.

Concrete Seawall

COMPTROLLER'S OFFICE, CITY OF NEW ORLEANS, LA. New Orleans, La., 4th August, 1910. Pursuant to Ordinance No. 6639 N. C. S., sealed proposals will be received at this office until the hour of 11 o'clock A. M. Monday, the 19th day of September, 1910, for the construction of a reinforced concrete seawall on pile foundation, said wall to be about twenty-seven hundred feet (2700') long and fourteen feet (14') high, in the bed of Lake Pontchartrain at West End, this city; also sealed proposals will be received at the same time and place for filling in with earth dredged from the bed of Lake Pontchartrain, the area between the said seawall and the lake shore embracing approximately four hundred thousand (400,000) cubic yards of earth.

Deposit, one thousand dollars (\$1000) with the City Treasurer, and his receipt enclosed with bid for each seawall bid and for each filling bid.

Certified check may be enclosed in lieu of City Treasurer's receipt.

Bond, twenty-five per cent. (25%) of the estimated cost of the work, based on the prices bid in the contract.

City Engineer W. J. Hardee, Room 28 City Hall, will furnish bidders full information concerning the above-described work and copies of plans and specifications and blank form of proposal; no proposal will be considered unless submitted on such form. The lowest bidders must pay their city license before their bid can be accepted.

The city reserves the right to reject any and all bids.

CHAS. R. KENNEDY, City Comptroller.

Special Advertisements of General Interest.

HELP TO FEED THE PEOPLE!

You can best accomplish that purpose around Norfolk, Va. Come bring your own labor; buy cheap lands; produce every variety of food; get rich by following the example of all who have tried it. Write for full particulars.

ABBOTT MORRIS & CO. NORFOLK, VA.

YELLOW PINE FOR SALE

FOR SALE—In Warren County, North Carolina, within three miles of trunk line taking 7-cent rate of freight to Norfolk or Richmond, I have fifteen million feet of yellow pine, short leaf, that is good timber and can be bought right. Several smaller tracts in same vicinity.

W. W. ROBERTSON - NORFOLK, VIRGINIA

Opportunity for a Live Southern Town

A cotton mill (that is now running) equipped to work cotton waste, low grade stock, as well as straight cotton, that must enlarge its present facilities to advantageously take care of its business, will consider a proposition to move its plant to a town, provided mill buildings will be furnished and advantageous shipping facilities and plenty of labor assured.

Address SITE,
Care Manufacturers Record.

Virgin Long-Leaf Yellow Pine Timber for Sale

We offer for sale 15,000 acres of virgin long-leaf yellow pine timber, located in Central Florida near railroad, which will cut an average of 3500 feet of lumber and 35 turpentine boxes to the acre. The lands after being denuded of timber would be fine for farming purposes. Price \$7 per acre.

ALBERT FENDIG & CO.,
Brunswick, Ga.

Coal Lands for Sale in Franklin Co., Illinois

The best part of the county. Thickness of vein from 8½ to 11½ feet. Depth of coal from 480 to 550 feet. Four railroads on and within 2½ miles of land—Illinois Central, C. & E. I., Burlington and Iron Mountain. The best body of land in county for sale. In tracts from 2000 to 8000 acres. Address BOX 194, BENTON, ILL.

Eastern Kentucky Coal Lands

The center of coal-mining development and of increasing activity in coal lands for years to come must be Eastern Kentucky.

This is the best coal field in America, and offers an unequalled opportunity for investment in coal and timber lands.

Having had 30 years' experience in developing and handling Eastern Kentucky coal properties, I am in position to offer some exceptional opportunities.

B. R. HUTCHCRAFT

LEXINGTON, KY.

COAL LAND FOR SALE AND TIMBER TRACT WANTED

905 acres Pocahontas shaft coal in Wyoming County, West Virginia, four miles from railroad. Price \$30.00 per acre. This is a bargain and worth investigating. WANTED: A tract of hard-wood timber, close to the railroad or water transportation.

BELLER & WILSON,
402-404 National Exchange Bank Bldg., Roanoke, Va.

TIMBER LANDS

DO YOU INTEND TO BUY OR SELL TIMBER TRACTS?

I furnish detailed report on Stumpage, Cost of Logging, Railroad Construction, Timber Maps.

F. R. MEIER, Consulting Forester and Timber Expert No. 1 Broadway, New York

24 years' practical experience. Formerly Forest Expert U. S. Forest Service; State Forester of New York; Timber Expert Penn. Forest Com., etc.

FOR

Coal, Oil and Gas Land Leases

WRITE

C. W. DEMING CO.

Real Estate Dealers

TULSA, - - - OKLA.

To Manufacturers:

We are old-established Power Pump Manufacturers in the North, but most of our business is South and West. We want to dispose of our business, and will sell the Patterns, Machinery and Good Will, as purchaser may require.

Principals only need answer.

Address **PUMPS**

Care Manufacturers Record.



PICTURE OF TIMBER ON TRACT

50 Thousand Acres Virgin Timber

Long Leaf Yellow Pine and Cypress. Railroad and water transportation. The last large tract of virgin timber on railway in South Florida.

In Kissimmee Valley in flowing well district

The wells that made Sanford famous. These lands when cleared will sell for \$300 to \$1000 per acre for truck, fruit and farming. Responsible parties will be furnished maps and particulars.

W. L. VAN DUZOR, - Kissimmee, Fla.

A Large Tract of Wet Alluvial Prairie Land Near New Orleans

Until about four months ago there was one million and a quarter acres of this rich and fertile land in the vicinity of New Orleans for sale.

A firm of strong Chicago operators bought, for immediate improvement, one million acres of the Wisner lands. This company is amply able financially to continuously carry on the drainage of this great holding until it is all reclaimed and sold to farmers. It is for this purpose they bought the land.

Another equally as strong syndicate of Chicago men bought about one hundred thousand acres, for which they paid cash, and which land they are just at this time beginning to improve.

Nearly two years ago a syndicate of local and Eastern men bought four tracts of the Wisner lands, aggregating eighty-five thousand acres. There is one tract of six thousand acres, one of eight thousand acres, one of nine thousand acres and one of sixty-two thousand acres.

They desire to sell the sixty-two thousand acre tract, and they authorize me to offer it and find a purchaser.

This tract of land is five miles wide and twenty miles long. It is all rich alluvial land, covered with a rank growth of prairie grass. It has good water transportation, and is near the Southern Pacific Railroad.

The price is \$5.00 per acre, and easy terms will be made.

All of the surrounding land is in strong hands, and was bought within these two years for improvement.

This is the largest tract of wet alluvial prairie land near New Orleans which can be bought at this time. In the United States there is not another as good investment.

Section maps and detailed information will be promptly furnished.

O. W. CRAWFORD, Manager

Maison Blanche Building

NEW ORLEANS, LA.

FOR SALE MANUFACTURING PLANT

New, modern, electrical equipped, ideal location with reference to timber, fuel, labor and shipping facilities. Will take stock in established or new enterprise. If you are contemplating a change of location or the establishment of a new enterprise, this is an opportunity of a lifetime. Address
THE HICKMAN-EBBERT CO.,
Owensboro, Ky.

STONE QUARRY and CRUSHING PLANT FOR SALE

An exceptional opportunity. Location, Wake County, North Carolina. Demand in excess of output at good prices. Address
C. R. KENNON, Boscobel, Va.

HARLAN, KENTUCKY, WANTS WATERWORKS

The Town of Harlan, Ky., is open to offers from private corporations to establish waterworks system. Water of the purest quality can be secured by piping from Pine Mountain, about two and one-half miles distant, and from a sufficient elevation to insure a gravity system for the town.

Full information will be furnished by applying to

HARLAN COMMERCIAL CLUB
WILL WARD DUFFIELD, Sec'y.

FOR SALE—Planing Mill and Retail Lumber Yard. Will bear investigation. Reasonable terms to good parties. Principals only need answer.
C. E. ANDREWS LUMBER CO.,
New Bethlehem, Pa.

Corn and Wheat Mill Machinery FOR SALE

I furnish designs and estimates on corn and wheat mill machinery, mill and elevator supplies, flour blending and mixing outfits, feed grinding and mixing plants and millwright work of every description.
W. C. EDWARDS,
P. O. Box 157, Atlanta, Ga.

1100 Acres Coal Lands

FOR SALE, or will lease on favorable terms 1100 acres coal land in Bell county, Kentucky, on Cumberland Valley division of the L. & N. Railway. For particulars address Philadelphia Vencer & Lumber Co., 817 North 5th street, Philadelphia, Pa., and Knoxville, Tenn.

FACTORY FOR SALE

New, Modern Pipe Organ Works

Stock on hand. Complete Machine Shop and Woodworking Plants. Oak country. Abundance of help. A very low price and your own terms.

M. C. HOBART, Receiver, Middleport, Ohio.

THERE ARE MILLIONS IN IT

For Sale—95,000 acres of Virgin timber lands in the finest section of Florida; estimated cut, 450,000,000 ft. of merchantable L. L. yellow pine, 250,000,000 ft. of merchantable red cypress and 50,000,000 ft. of oak, ash, maple and gum; 50,000 acres of this tract underlaid with over 30 ft. of carbonate of lime; analysis, 95 to 98 per cent.; also deposits of marl and cement. 155 acres in fine kaolin clay in Central Georgia. A special bargain in 225,000 acres of virgin pine and cypress in South Florida. Write for further information to JAS. A. HARLEY, Sparta, Ga.

COMMONWEALTH OF KENTUCKY.
FAYETTE CIRCUIT COURT.

Security Trust Company of Lexington,
Ky., Administrator of the Estate
of John B. Wilgus, Deceased,
vs.

Plaintiff,

AND CASES CONSOLI-
DATED THEREWITH.

Lucy T. Wilgus, &c.,

Defendants.

Under and by virtue of a judgment of the Fayette Circuit Court rendered on the first day of August, 1910, in the above-styled action and cases consolidated therewith, the undersigned, Master Commissioner of said court, will sell at public auction to the highest bidder at the courthouse door in Somerset, Pulaski county, Kentucky, beginning at or about the hour of 10 o'clock in the forenoon, on Wednesday, September 7th, 1910, all of the following described lands, and all of the right, title and interest of the parties to the above-styled consolidated actions in and to said lands, or any portion thereof, to wit:—

The several tracts of land containing in all about 10,468 acres, and the mineral rights in about 172 acres, making in the aggregate about 10,640 acres, known as the "Flat Rock Coal and Timber Lands," lying between the Cincinnati Southern Railroad, the Jacksboro Road and the South Fork of the Cumberland River, in Pulaski county, Kentucky. Said lands are in several tracts, a description by metes and bounds of which is given in the judgment entered in the above-styled consolidated actions.

Said sale shall be made upon a credit of six, twelve and eighteen months, equal installments of the purchase price, the purchaser or purchasers being required to execute bond with good security thereon for the purchase price, bearing interest at the rate of six per cent. per annum from the day of sale until paid, or the purchaser may pay cash at any time after the confirmation of said sale.

Said sale shall begin at or about 10 o'clock in the forenoon on the 7th day of September, 1910, and continue from day to day, if necessary to complete the same, commencing at or about the same time each day.

A blueprint of the map of said lands can be seen at the law office of O. H. Waddle & Son, Somerset, Pulaski county, Kentucky.

R. J. COLBERT,

Master Commissioner, Fayette Circuit Court.

FALCONER & FALCONER,
ALLEN & DUNCAN,
Attorneys.

Bargains in Machinery and Supplies.

Eastern Railway Supply Company

413-414 American Building

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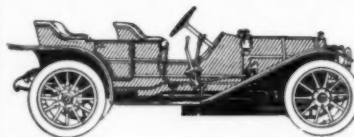
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36x16 Reed, C. R., P. C. F.
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21" Gisholt Lathe.
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24"x15" Fay Two-Roll Single Surfer.
24"x16" Powers Four-Roll Single Surfer.
20" Egan Double-Drum Sander.
24" Watertown Double-Drum Sander.
24" Gleason Hand Jointer.
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10" Rowley & Hermance Four-Side Moulder.
9" American Houston Four-Side Moulder.
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Dubuque Chain Mortiser, 17 chains.

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2 200 H. P. Babcock & Wilcox Water-Tube, 150 lb. steam.
3 200 H. P. Berry Vert. Water-Tube, 125 lb. steam.
2 150 H. P. Manning Vertical, 115 lb. steam.
3 12"x18" Horizontal Return Tubular, 125 lb. steam.
1 72"x16" Horizontal Return Tubular, 120 lb. steam.
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24"x46"x48" Cross Compound Wetherill.
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84"x84"x24" Putnam.
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46"x18" Triple Geared.
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24"x18" Fitchburg.
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Large stock of small Lathes always in stock.

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20"x30" Pedrick & Ayer, open slide.
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20" Steptoe.
16" Cincinnati, back geared.
16" Steptoe.
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MISCELLANEOUS.

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- 1 150 H. P. 14x28 Buckeye, R. H.
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- 1 20 H. P. new Double-Cylinder Vertical Gasoline Engine.
- 1 8 H. P. new Single-Cylinder Vertical Gasoline Engine.

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- 12 72x20 Horizontal Tubular Boilers, 100 lbs.
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- 1 20x13x12 Wheeler & Tappen Duplex Pump.
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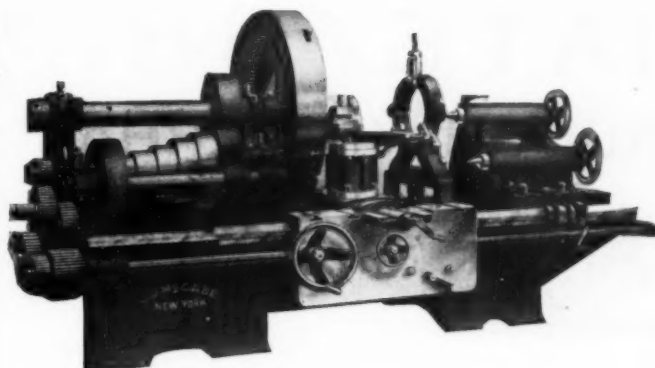
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WORKS:
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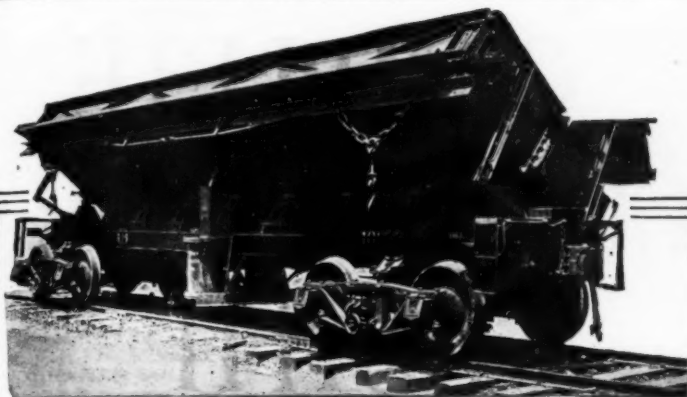
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(This order was increased to 300 after the excellent construction of this type of car was fully gone into.)

300 MEANS APPROVAL, NOT TRIAL

ISTHMIAN CANAL COMMISSION,
Corps of Engineers, U. S. Army. Purchasing Department,
General Purchasing Officer. Washington, D. C.
Registered Mail. Washington Order No. 21457, Feb. 12, 1910.

Dear Sirs—I enclose herewith contract in triplicate between the Commission and your company for dump cars, dated February 7, 1910, which you will please execute in triplicate and return to this office at the earliest practical date.

You will observe that there is attached to the contract a blank form of bond for its fulfillment, which provides for a corporate surety. This should also be executed in triplicate, in strict compliance with the instructions contained in the notes at the foot thereof. When the three copies of contract have been received by this office, properly executed, one copy will be returned for your files. By direction of the General Purchasing Officers.

3 Inclosures. O. C. DOLE, Chief Clerk, Purchasing Dept.
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8 1/2"x10" Lidgerwood, dbie. cyl., dbie. drum.
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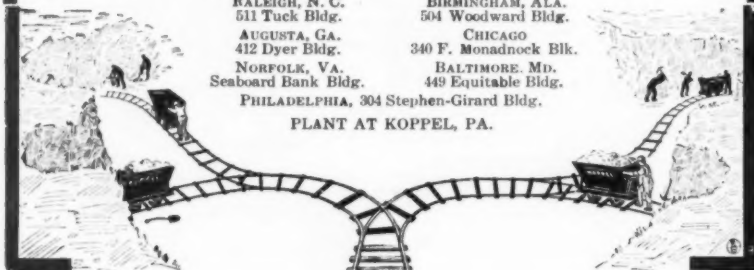
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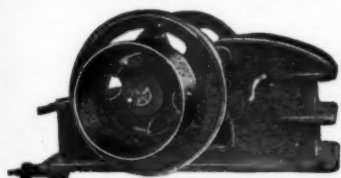
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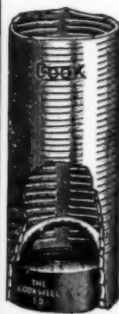
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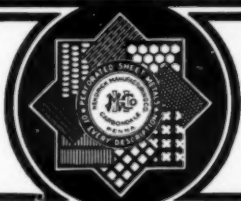
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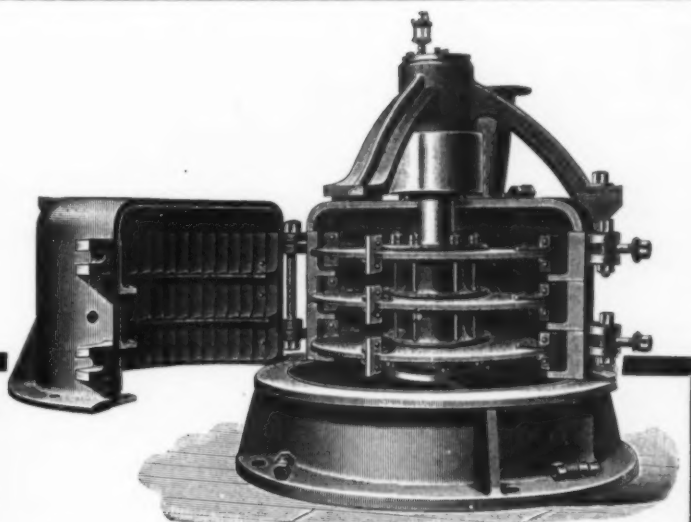
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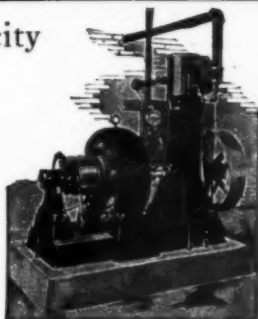
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Providence Belting Co., Providence, R. I.
Revere Rubber Co., Boston, Mass.
Rosendale-Reddaway B. & H. Co., Newark, N. J.
Voorhees Rubber Mfg. Co., Jersey City, N. J.
Williams & Sons, I. B., Dover, N. H.
- Belt.** (Chain.)
American Belting Co., Youngstown, O.
Bartlett & Snow Co., C. O., Cleveland, O.
Caldwell & Sons Co., H. W., Chicago, Ill.
Jeffrey Mfg. Co., Columbus, O.
Link-Belt Co., Nicoletown (Philadelphia), Pa.
Morse Chain Co., Ithaca, N. Y.
- Belt Conveyors.**
Stephens-Adams Mfg. Co., Aurora, Ill.
- Belt Dressing.**
American Belting Co., Youngstown, O.
Diamond Rubber Co., Akron, Ohio.
Gandy Belting Co., Baltimore, Md.
Revere Rubber Co., Boston, Mass.
- Belt Fasteners.**
Crescent Belt Fastener Co., New York, N. Y.
- Belt Lacing and Supplies.** [See Belting, Leather, etc.]
- Bicarbonate Soda.** (Preventing Sap Stain in Lumber.)
Church & Dwight Co., New York, N. Y.
- Blackboards.** (Slate.)
East Bangor Con. Slate Co., The, East Bangor, Pa.
Hower, J. K., Stratford, Pa.
Johnson, E. J., New York, N. Y.
- Blowers.** (Pressure.)
American Blower Co., Detroit, Mich.
Sirocco Engineering Co., Detroit, Mich.
Sturtevant Co., B. F., Hyde Park, Mass.
- Blowers and Exhaust Fans.**
American Blower Co., Detroit, Mich.
Buffalo Forge Co., Buffalo, N. Y.
De Laval Steam Turbine Co., Trenton, N. J.
General Electric Co., Schenectady, N. Y.
Green Fuel Economizer Co., Matteawan, N. Y.
Raymond Bros. Impact Pulv. Co., Chicago, Ill.
Savannah Blow Pipe Co., Savannah, Ga.
Sirocco Engineering Co., Detroit, Mich.
Southward Foundry & Machine Co., Phila., Pa.
Sturtevant Co., B. F., Hyde Park, Mass.
Tennessee Blow Pipe Co., Inc., Chattanooga, Tenn.
- Blueprint Apparatus.**
Keuffel & Esser, Hoboken, N. J.
- Boilers.**
Abendroth & Root Mfg. Co., Newburgh, N. Y.
Babcock & Wilcox Co., New York, N. Y.
Cameron & Barker Co., Charleston, S. C.
Casey-Hedges Co., Chattanooga, Tenn.
Chandler & Taylor Co., Indianapolis, Ind.
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Chicago House Wrecking Co., Chicago, Ill.
Cole Mfg. Co., R. D., Newman, Ga.
Cooper Co., C. & G., Mt. Vernon, O.
Gibbs Machinery Co., Columbia, S. C.
Hartley Boiler Works, Montgomery, Ala.
Heine Safety Boiler Co., St. Louis, Mo.
Keeler Co., E., Williamsport, Pa.
Lookout Boiler & Mfg. Co., Chattanooga, Tenn.
Lounard Iron Works, Augusta, Ga.
Mecklenburg Iron Works, Charlotte, N. C.
Murray Iron Works Co., Burlington, Iowa.
Norton Machinery Co., Cincinnati, O.
Petroleum Iron Works Co., Sharon, Pa.
Phoenix Iron Works Co., Meadville, Pa.
Price Machinery Co., S. M., Norfolk, Va.
Schiffeld & Sons Co., J. S., Macon, Ga.
Smith-Courtney Co., Richmond, Va.
Southern Engine & Boiler Works, Jackson, Tenn.
Stockell-Myers Co., Petersburg, Va.
Tudor Boiler Mfg. Co., The, Cincinnati, O.
Union Iron Works Co., Selma, Ala.
Valk & Murdoch Iron Works, Charleston, S. C.
Vogt Machine Co., Henry, Louisville, Ky.
Walsh & Weldner Boiler Co., Chattanooga, Tenn.
Wetherill & Co., Inc., Robt., Chester, Pa.
- Boiler Shop Tools.**
Covington Machine Co., Covington, Va.
- Boiler Stay Bolts.**
American Iron & Steel Mfg. Co., Lebanon, Pa.
- Boiler Tubes.** [See Tubes, Boiler.]
- Bolts, Nuts, Rivets, Studs and Washers.**
American Iron & Steel Mfg. Co., Lebanon, Pa.
Milton Mfg. Co., Milton, Pa.
Nicolet Plate Washer Co., Philadelphia, Pa.
Republic Iron & Steel Co., Pittsburg, Pa.
Russell, Burdall & Ward Bolt & Nut Co., Port Chester, N. Y.
- Bonds.** (Fidelity, etc.)
Fidelity & Deposit Co., Baltimore, Md.
- Bottling Outfits.**
Vilter Mfg. Co., Milwaukee, Wis.
- Box Shooks.**
Naylor & Co., S. E., Gulfport, Miss.
- Brass Goods.**
Bailey-Lebby Co., Charleston, S. C.
Buckeye Iron & Brass Works, Dayton, O.
Ludlow-Saylor Wire Co., The, St. Louis, Mo.
- Brewers' Machinery.**
Vilter Mfg. Co., Milwaukee, Wis.
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Brookhaven Pressed Brick & Mfg. Co., Brookhaven, Miss.
Carolina Portland Cement Co., Charleston, S. C.
Hood, B. Midlin, Atlanta, Ga.
Hydraulic Pressed Brick Co., St. Louis, Mo.
Oconee Brick & Tile Co., Milledgeville, Ga.
Powhatan Clay Mfg. Co., Richmond, Va.
Sibley-Menge Press Brick Co., Birmingham, Ala.
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Baltimore Refractor & Fire Brick Co., Baltimore, Md.
Harbison-Walker Refractories Co., Pittsburg, Pa.
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Keystone Furnace Co., Washington, D. C.
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Brookhaven Pressed Brick & Mfg. Co., Brookhaven, Miss.
Harbison-Walker Refractories Co., Pittsburg, Pa.
Keystone Furnace Co., Washington, D. C.
Kilian Fire Brick Works, Killian, S. C.
Louisville Fire Brick Works, Highland Park, Ky.
Pomona Terra-Cotta Co., Pomona, N. C.
Powhatan Clay Mfg. Co., Richmond, Va.
Stevens' Sons Co., H., Macon, Ga.
Taylor's Sons Co., Chas., Cincinnati, O.
Union Mining Co., Mt. Savage, Md.
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Harbison-Walker Refractories Co., Pittsburg, Pa.
- Brick.** (Paving.)
Carlyle Paving Brick Co., Portsmouth, O.
Copeland-Ingalls Brick Co., Birmingham, Ala.
Southern Clay Mfg. Co., Chattanooga, Tenn.
- Brick Machinery.** (Sand Lime.) [See Sand-Lime Brick Machinery.]
- Brick and Clayworking Machinery and Supplies.**
American Clay Mchry. Co., The, Bucyrus, Ohio.
Carnell, George, Philadelphia, Pa.
Pernholz Brick Machinery Co., St. Louis, Mo.
Freese & Co., E. M., Galion, O.
Gibbs Machinery Co., Columbia, S. C.
Scott-Madden Iron Works, St. Louis, Mo.
Steele & Sons, J. C., Statesville, N. C.
Taplin-Rice-Clerkin Co., Akron, Ohio.
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Cates Mch. & Bridge Co., Burlington, N. C.
Concrete Steel Engineering Co., New York, N. Y.
- Bridges.** (Rolling Lift.)
Scherzer Rolling Lift Bridge Co., Chicago, Ill.
- Bridges.**
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Baltimore Bridge Co., Baltimore, Md.
Belmont Iron Works, Inc., Philadelphia, Pa.
Cates Mch. & Bridge Co., Burlington, N. C.
Des Moines Bridge & Iron Co., Des Moines, Iowa.
Farris Bridge Co., Pittsburg, Pa.
Missouri Val. Bridge & Iron Co., Leavenworth, Kan.
Owego Bridge Co., Owego, N. Y.
Ritter-Conley Mfg. Co., Pittsburg, Pa.
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Chattanooga Paint Co., Chattanooga, Tenn.
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Dixie Crucible Co., Joseph, Jersey City, N. J.
St. Louis Surface & Paint Co., St. Louis, Mo.
Standard Paint Co., New York, N. Y.
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Union Sulphur Co., New York, N. Y.
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Hayward Co., New York, N. Y.
Williams Co., The G. H., Cleveland, O.
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Hayward Co., New York, N. Y.
Link-Belt Co., Nicoletown (Philadelphia), Pa.
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Williams Co., The G. H., Cleveland, O.
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- Burners.** (Oil.) [See Fuel Oil Equipments.]
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Williamsport Wire Rope Co., Williamsport, Pa.
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Mead-Morrison Mfg. Co., Cambridgeport, Mass.
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- Canning Machinery and Supplies.**
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Sinclair-Scott Co., Baltimore, Md.
Sprague Canning Machinery Co., Chicago, Ill.
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Carborundum Co., Niagara Falls, N. Y.
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Hicks Locomotive and Car Works, Chicago, Ill.
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Ohio Ceramic Engineering Co., Cleveland, O.
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Safety Car H't'g & L'ght'g Co., New York, N. Y.
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Orenstein-Arthur Koppel Co., Pittsburg, Pa.
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Farley Mfg. Co., Decatur, Ill.
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American Cement Co., Philadelphia, Pa.
Atlas Portland Cement Co., New York, N. Y.
Carolina Portland Cement Co., Charleston, S. C.
Irlie Portland Cement Co., Chattanooga, Tenn.
Hartman Cement Co., Wm. G., Philadelphia, Pa.
Ironport Portland Cement Co., Ironport, O.
Kosmos Portland Cement Co., Louisville, Ky.
Security Cement & Lime Co., Baltimore, Md.
Southeastern Lime & Cement Co., Charleston, S. C.
Southern States Portland Cem. Co., Rockmart, Ga.
St. Louis Portland Cement Co., St. Louis, Mo.
Universal Portland Cement Co., Chicago, Ill.
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Ford Chain Block Co., Philadelphia, Pa.
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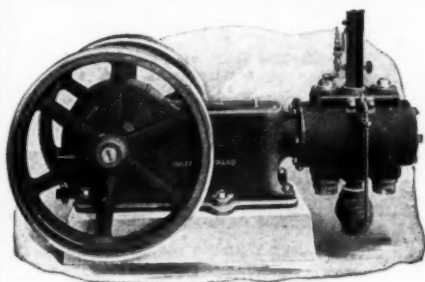
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Continental Gin Co., Birmingham, Ala.
Gibbs Machinery Co., Columbia, S. C.
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Van Winkle Gin & Machine Co., Atlanta, Ga.

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American Supply Co., Providence, R. I.
Carroll Supply Co., Greenville, S. C.
Draper Co., Hopedale, Mass.

Kitsen Machine Shop, Lowell, Mass.
Lowell Machine Shop, Lowell, Mass.
Mason Machine Works, Taunton, Mass.
Saco-Petee Co., Newton, Upper Falls, Mass.
Whitlin Machine Works, Whitinsville, Mass.
Whitinsville Sping' Ring Co., Whitinsville, Mass.

Cotton-Mill Supplies.

American Supply Co., Providence, R. I.
Carroll Supply Co., Greenville, S. C.
Whitinsville Sping' Ring Co., Whitinsville, Mass.

Cottonseed-Oil Machinery.

Buckeye Iron and Brass Works, Dayton, O.
Burruss Engineering Co., Atlanta, Ga.
Callahan Co., W. P., The, Dayton, O.
Cardwell Machine Co., Richmond, Va.
Carver Cotton Gin Co., East Bridgewater, Mass.
Continental Gin Co., Birmingham, Ala.
Foss Manufacturing Co., Springfield, O.
Platt Iron Works Co., Dayton, O.
Raymond Bros. Impact Pulv. Co., Chicago, Ill.
Van Winkle Gin & Machine Co., Atlanta, Ga.

Couplings.

American Spiral Pipe Works, Chicago, Ill.
Caldwell Co., Inc., W. E., Louisville, Ky.
Dodge Manufacturing Co., Mishawaka, Ind.
Goldens Foundry & Machine Co., Columbus, Ga.
Skelton-Scott Co., Baltimore, Md.
Wood's Sons, T. B., Chambersburg, Pa.

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National Tube Co., Pittsburg, Pa.

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Carroll Portland Cement Co., Charleston, S. C.
Johns-Manville Co., H. W., New York, N. Y.
Knowles & Co., Inc., Frank A., Baltimore, Md.
Southern Pipe Covering Co., Inc., Richmond, Va.

Cranes. (Traveling, Hand, Power, Hydraulic.)

Browning Engineering Co., The, Cleveland, O.
Hayward Co., New York, N. Y.
Lane Mfg. Co., Montpelier, Vt.
Northern Engineering Works, Detroit, Mich.
Spindel, J. G., Reading, Pa.
Whiting Foundry Equipment Co., Harvey, Ill.

Crayons.

Lowell Crayon Co., Lowell, Mass.

Creosote.

Carroll Portland Cement Co., Charleston, S. C.

Creosoting Works.

American Creosote Works, Inc., New Orleans, La.
Gulfport Creosoting Co., Gulfport, Miss.
Internat'l Creosot'g & Cons. Co., Galveston, Tex.
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National Lumber & Creosot'g Co., Texarkana, Ark.
Southern Creosoting Co., Ltd., Slidell, La.
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W. Pascagoula Creos. Wks., W. Pascagoula, Miss.

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Kettle River Co., St. Louis, Mo.
Lee Electric Co., Baltimore, Md.
Southern Creosoting Co., Ltd., Slidell, La.
Western Electric Co., New York, N. Y.

Crossings. [See Railroad Frogs and Switches.]

Crossite Machine.

Standard Cross Tie Mch. Co., New Orleans, La.

Crosssties.

Gulfport Creosoting Co., Gulfport, Miss.
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Kettle River Co., St. Louis, Mo.
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Southern Creosoting Co., Ltd., Slidell, La.
W. Pascagoula Creos. Wks., W. Pascagoula, Miss.

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Power & Mining Machinery Co., Cudahy, Wis.
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Power & Mining Machinery Co., Cudahy, Wis.
Raymond Bros. Impact Pulv. Co., Chicago, Ill.
Smith Co., T. L., Chicago, Ill.
Universal Road Mch. Co., New York, N. Y.

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American Vanadium Co., Pittsburg, Pa.

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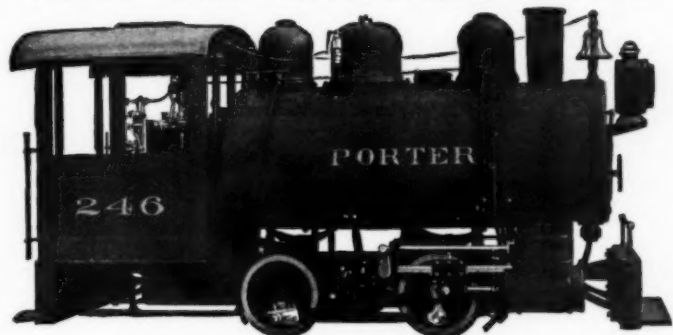
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Moffatt Machinery Mfg. Co., Charlotte, N. C.
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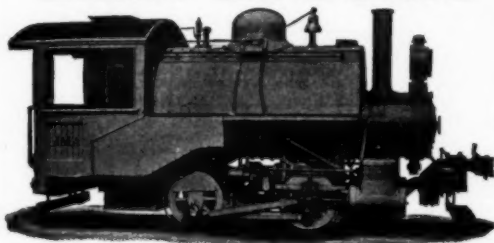
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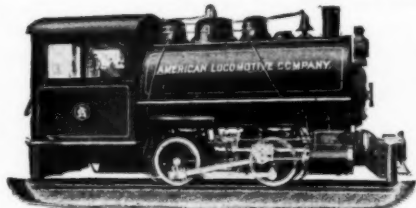
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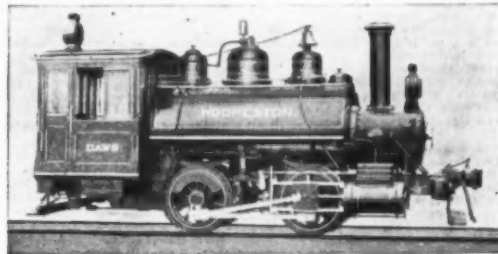
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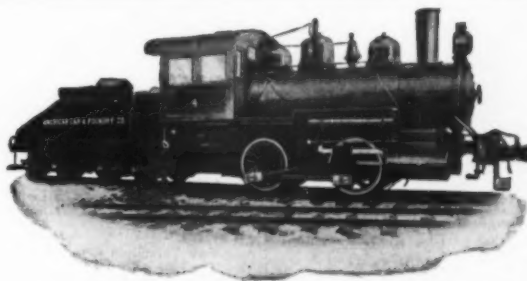
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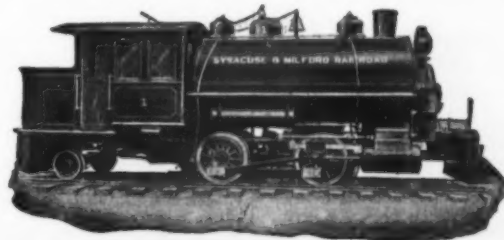
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Mead-Morrison Mfg. Co., Cambridgeport, Mass.
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Stroudsburg Engine Works, Stroudsburg, Pa.
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Williamson Bros. Co., Philadelphia, Pa.
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Ingersoll-Rand Co., New York, N. Y.
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Blaisdell Machinery Co., Bradford, Pa.
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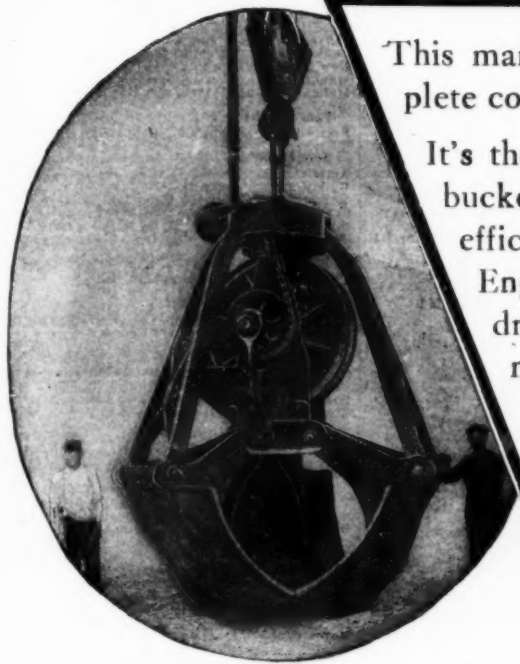
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McClary-Jemison Mch. Co., Birmingham, Ala.
Mecklenburg Iron Works, Charlotte, N. C.
Nordyke & Marmon Co., Indianapolis, Ind.
Reuter-Jones Mfg. Co., St. Louis, Mo.
Salem Foundry & Machine Works, Salem, Va.
Smith-Courtney Co., Richmond, Va.
Starr Co., B. F., Baltimore, Md.
Stockell-Myers Co., Petersburg, Va.
Wolf Co., Chambersburg, Pa.
- Mining Machinery. (Gold, Copper, Plate, etc.)**
Aising Engineering Co., J. B., New York, N. Y.
Bartlett & Snow Co., C. O., Cleveland, O.
Cresson Co., Geo. V., Philadelphia, Pa.
Jeffrey Mfg. Co., Columbus, O.
Lidgerwood Mfg. Co., New York, N. Y.
McLanahan-Stone, Hollidaysburg, Pa.
Mecklenburg Iron Works, Charlotte, N. C.
Power & Mining Machinery Co., Cudahy, Wis.
Raymond Bros. Impact Pulv. Co., Chicago, Ill.
- Mixing Machinery.**
Donning, W. D., Syracuse, N. Y.
Lynn-Superior Co., The Cincinnati, O.
- Monuments, etc. (Granite.)**
Menton Granite Co., Oklahoma City, Okla.
- Mortar Colors.**
Chattanooga Paint Co., Chattanooga, Tenn.
- Motor Repairs.**
Westinghouse Elec. & Mfg. Co., Pittsburgh, Pa.
- Mouldings, Casings, etc.**
Massee & Felton Lumber Co., Macon, Ga.
- Nails and Spikes.**
American Iron & Steel Mfg. Co., Lebanon, Pa.
Hoffman & Co., R. C., Baltimore, Md.
Republic Iron & Steel Co., Pittsburgh, Pa.
Youngstown Sheet & Tube Co., Youngstown, O.
West Virginia Rail Co., The Huntington, W. Va.
- Nails. (Roofing.)**
Weather Proofing Nail Co., Baltimore, Md.
- Nitre Pots, Eggs.**
Carolina Iron Works, Baltimore, Md.
- Nuts. [See Bolts, Nuts, Rivets, etc.]**
- Office Furniture.**
Quincy Show Case Works, Quincy, Ill.
- Oils. (Lubricating, etc.)**
Galena Signal Oil Co., Franklin, Pa.
Gulf Refining Co., Pittsburgh, Pa.
Robinson & Son Co., Wm. C., Baltimore, Md.
Texas Co., The New York, N. Y.
- Oil-Burning Appliances.**
Petroleum Iron Works Co., Sharon, Pa.
- Oilers.**
Wall Mfg. Supply Co., P., Allegheny, Pa.
- Oilless Bearings.**
North Amer. Metaline Co., Long Island City, N. Y.
- Oil Separators.**
Amer. Radiator Co., Bundy Dept., New York, N. Y.
- Oil Stones.**
Carborundum Co., Niagara Falls, N. Y.
Norton Co., Worcester, Mass.
- Oil-Well Machinery.**
Keystone Steam Well Mach. Co., Beaver Falls, Pa.
Williams Bros., Ithaca, N. Y.
- Ornamental Iron Work.**
Bartlett-Hayward Co., The Baltimore, Md.
Belmont Iron Works, Inc., Philadelphia, Pa.
Bolles Iron & Wire Works, J. E., Detroit, Mich.
Chattanooga Iron & Wire Wks., Chattanooga, Tenn.
Chesapeake Iron Works, Baltimore, Md.
Dow Wire Works Co., Louisville, Ky.
Meiser & Son, H., Baltimore, Md.
Ohio Elevator & Machine Co., The Columbus, O.
Roanoke Iron Works, Inc., Roanoke, Va.
Schreiber & Sons Co., The L., Cincinnati, O.
Snead Architectural Iron Works, Louisville, Ky.
- Packing. (Asbestos, Metallic, Rubber, Leather, etc.)**
Jenkins Bros., New York, N. Y.
Johns-Manville Co., H. W., New York, N. Y.
N. J. Car Spring & Rubber Co., Jersey City, N. J.
Power Specialty Co., New York, N. Y.
Revere Rubber Co., Boston, Mass.
Voorhees Rubber Mfg. Co., Jersey City, N. J.
- Paint. (Bridge.)**
U. S. Metal & Mfg. Co., New York, N. Y.
- Paint. (Cold Water.)**
U. S. Metal & Mfg. Co., New York, N. Y.
- Paint. (Roofing, Building, etc.)**
Armistage Mfg. Co., The Richmond, Va.
Bird & Son, F. W., East Walpole, Mass.
Cameron & Barkley Co., Charleston, S. C.
Carolina Portland Cement Co., Charleston, S. C.
Chattanooga Paint Co., Chattanooga, Tenn.
Detroit Graphite Co., Detroit, Mich.
Dixon Crucible Co., Joseph, Jersey City, N. J.
Elatrite Paint & Mfg. Co., The Des Moines, Ia.
Rabok Mfg. Co., St. Louis, Mo.
St. Louis Surfer & Paint Co., St. Louis, Mo.
Standard Paint Co., New York, N. Y.
- Paint Machinery.**
Lynn Superior Co., The Cincinnati, O.
- Paint. (Metal Preservative.)**
U. S. Metal & Mfg. Co., New York, N. Y.
- Paper. (Roofing, Building, Sheathing, etc.)**
Armistage Mfg. Co., The Richmond, Va.
Bartlett Mfg. Co., Philadelphia, Pa.
Bird & Son, F. W., East Walpole, Mass.
Cameron & Barkley Co., Charleston, S. C.
Southeastern Lime & Cement Co., Charleston, S. C.
- Paste.**
Stricker & Co., Henry H., Baltimore, Md.
- Patent Attorneys.**
Brown, Eugene C., Washington, D. C.
Bunyea Co., E. F., Washington, D. C.
Chandler & Chassee, Washington, D. C.
Evans & Co., Victor J., Washington, D. C.
Lacey, R. S. & A. B., Washington, D. C.
Peck, H. E., Washington, D. C.
- Pattern Letters.**
St. Louis Electrotyping Foundry, St. Louis, Mo.
- Patterns.**
Roanoke Iron Works, Inc., Roanoke, Va.
- Pavement Filler.**
Barrett Mfg. Co., Philadelphia, Pa.
- Paving. (Road and Street, etc.)**
Barber Asphalt Paving Co., Philadelphia, Pa.
- Paving Blocks. (Wood Creosote-Resinate.)**
American Creosote Works, Inc., New Orleans, La.
Gulfport Cressoting Co., Gulfport, Miss.
Kettle River Co., St. Louis, Mo.
Southern Wood Preserving Co., Atlanta, Ga.
U. S. Wood Preserving Co., New York, N. Y.
- Paving Brick.**
Carlyle Paving Brick Co., Portsmouth, O.
Copeland-Ingalls Shale Brick Co., Birm'gh'm, Ala.
Southern Clay Mfg. Co., Chattanooga, Tenn.
- Perforated Metal.**
Caldwell & Son Co., H. W., Chicago, Ill.
Clinton Wire Cloth Co., Boston, Mass.
Cross Engineering Co., Carbondale, Pa.
Erdle Perforating Co., Rochester, N. Y.
Hendrick Mfg. Co., The Carbondale, Pa.
Mundt & Sons, Charles, Jersey City, N. J.
- Petroleum Refiners.**
Gulf Refining Co., Pittsburgh, Pa.
- Phosphate Machinery.**
Aising Engineering Co., J. B., New York, N. Y.
American Process Co., New York, N. Y.
Bailey-Lebby Co., The Charleston, S. C.
Cameron & Barkley Co., Charleston, S. C.
Cresson Co., Geo. V., Philadelphia, Pa.
Foss Manufacturing Co., Springfield, O.
Link-Belt Co., Nictown (Philadelphia), Pa.
McLanahan-Stone Mach. Co., Hollidaysburg, Pa.
Raymond Bros. Impact Pulv. Co., Chicago, Ill.
Valk & Murdock Iron Works, Charleston, S. C.
Walker & Elliott, Wilmington, Del.
- Phosphor-Bronze. (Wire Rods, Sheets.)**
Phosphor-Bronze Smelting Co., Phila., Pa.
- Pile Drivers.**
Bucyrus Co., The Milwaukee, Wis.
- Piling. (Creosoted.)**
American Creosote Works, Inc., New Orleans, La.
Gulfport Cressoting Co., Gulfport, Miss.
Intern'l Cressoting & Const. Co., Galveston, Tex.
Kettle River Co., St. Louis, Mo.
Southern Cressoting Co., Ltd., Slidell, La.
W. Pascaglia's Cressot. Wks., W. Pascaglia, Miss.
- Piling. (Steel Sheet.)**
Carnegie Steel Co., Pittsburgh, Pa.
- Pillow Blocks.**
Caldwell Co., Inc., W. E., Louisville, Ky.
Cresson Co., Geo. V., Philadelphia, Pa.
Dodge Manufacturing Co., Mishawaka, Ind.
Golden's Foundry & Machine Co., Columbus, Ga.
- Pipe. (Cast Iron.)**
American Cast Iron Pipe Co., Birmingham, Ala.
American Pipe & Construction Co., Phila., Pa.
Dimnick Pipe Co., Birmingham, Ala.
General Fire Extinguisher Co., Providence, R. I.
Glamorgan Pipe & Foundry Co., Lynchburg, Va.
McWane Pipe Works, Lynchburg, Va.
Starr Pipe Supply Co., Brooklyn, N. Y.
U. S. Cast Iron Pipe & Fdry. Co., New York, N. Y.
Wood & Co., R. D., Philadelphia, Pa.
- Pipe. (Coll.)**
Columbus Iron Works Co., Columbus, Ga.
Frick Co., The Waynesboro, Pa.
National Pipe Bending Co., New Haven, Conn.
Whitlock Coll. Pipe Co., Hartford, Conn.
Wolf Co., Fred W., Chicago, Ill.
- Pipe. (Corrugated Culvert.)**
American Rolling Mill Co., Middletown, O.
Canton Culvert Co., The Canton, O.
Dixie Culvert & Metal Co., Atlanta, Ga.
Panama Tank Co., New Orleans, La.
Virginia Metal Culvert Co., Roanoke, Va.
- Pipe. (Reinforced Concrete.)**
Lock Joint Pipe Co., New York, N. Y.
- Pipe. (Riveted.)**
Abendroth & Root Mfg. Co., Newburgh, N. Y.
Keeler Co., E., Williamsport, Pa.
Petroleum Iron Works Co., Sharon, Pa.
- Pipe. (Spiral Riveted.)**
Abendroth & Root Mfg. Co., Newburgh, N. Y.
American Spiral Pipe Works, Chicago, Ill.
- Pipe. (Wood.)**
Wyckoff & Son Co., A., Elmira, N. Y.
- Pipe. (Wrought Iron.)**
General Fire Extinguisher Co., Providence, R. I.
La Belle Iron Works, Steubenville, O.
National Tube Co., Pittsburgh, Pa.
Susquehanna Iron Co., Columbia, Pa.
Youngstown Sheet & Tube Co., Youngstown, O.
- Pipe Bends.**
Columbus Iron Works Co., Columbus, Ga.
Whitlock Coll. Pipe Co., Hartford, Conn.
- Pipe Covering. (Steam.)**
Wyckoff & Son Co., A., Elmira, N. Y.
- Pipe Cutting and Threading Machinery.**
Saunders' Sons, D., Yonkers, N. Y.
- Pipe Fittings.**
American Cast Iron Pipe Co., Birmingham, Ala.
Charlotte Contract Co., Charlotte, N. C.
Columbian Iron Works, Chattanooga, Tenn.
Columbus Iron Works Co., Columbus, Ga.
General Fire Extinguisher Co., Providence, R. I.
Wolf Co., Fred W., Chicago, Ill.
- Pipe Jointing. (Gas and Water Main.)**
Leadite Co., The Philadelphia, Pa.
- Pipe Unions and Joints.**
Dart Mfg. Co., E. M., Providence, R. I.
National Tube Co., Pittsburgh, Pa.
Whitlock Coll. Pipe Co., Hartford, Conn.
- Pipe Wrenches and Cutters.**
Saunders' Sons, D., Yonkers, N. Y.
- Pitch.**
Barrett Mfg. Co., Philadelphia, Pa.
- Planers. (Metal.)**
Manning, Maxwell & Moore, Inc., New York, N. Y.
- Planing Mill work.**
Columbus Iron Works Co., Columbus, Ga.
Massee & Felton Lumber Co., Macon, Ga.
- Plaster. (Hard Wall.)**
U. S. Gypsum Co., Chicago, Ill.
- Plaster Boards.**
U. S. Gypsum Co., Chicago, Ill.
- Plaster Machinery.**
Bartlett & Snow Co., C. O., Cleveland, O.
- Plows. (Road.)**
Brinly-Hardy Co., Inc., Louisville, Ky.
Syracuse Chilled Plow Co., Syracuse, N. Y.
- Pneumatic Tools. [See Tools—Pneumatic.]**
- Poles. (Transmission Line; Steel.)**
U. S. Metal & Mfg. Co., New York, N. Y.
- Polishing Machinery. (Wheels and Blocks.)**
Carborundum Co., Niagara Falls, N. Y.
Vitriol Wheel Co., Westfield, Mass.
- Portable Tracks.**
Grenstein-Arthur Koppel Co., Pittsburgh, Pa.
- Posts. (Steel.)**
U. S. Metal & Mfg. Co., New York, N. Y.
- Power Transmission Machinery.**
Bailey-Lebby Co., Charleston, S. C.
Caldwell Co., Inc., W. E., Louisville, Ky.
Caldwell & Son Co., H. W., Chicago, Ill.
Cresson Co., Geo. V., Philadelphia, Pa.
Dayton Globe Iron Works Co., Dayton, O.
Dodge Manufacturing Co., Mishawaka, Ind.
Golden's Foundry & Machine Co., Columbus, Ga.
Greenwald Co., I. & E., Cincinnati, O.
Jeffrey Mfg. Co., Columbus, O.
Jones & Laughlin Steel Co., Pittsburgh, Pa.
Lane Mfg. Co., Montpelier, Vt.
Link-Belt Co., Nictown (Philadelphia), Pa.
Morse Chain Co., Ithaca, N. Y.
Nordyke & Marmon Co., Indianapolis, Ind.
Power Engineering & Machine Co., Baltimore, Md.
Power & Mining Machinery Co., Cudahy, Wis.
Price Machinery Co., S. M., Norfolk, Va.
Schofield's Sons Co., J. S., Macon, Ga.
Stockell-Myers Co., Petersburg, Va.
Wilmington Iron Works, Wilmington, N. C.
Wood's Sons Co., T. B., Chambersburg, Pa.
- Presses. (Baling, Cottonseed Oil, etc., Hydraulic and Power.)**
Boomer & Boeschert Press Co., Syracuse, N. Y.
Cardwell Machine Co., Richmond, Va.
Continental Gin Co., Birmingham, Ala.
Gibbs Machinery Co., Columbia, S. C.
Valk & Murdock Iron Works, Charleston, S. C.
Watson-Stillman Co., New York, N. Y.
- Presses. (Stamping.)**
Bliss Co., E. W., Brooklyn, N. Y.
Lefter & Co., Charles, Brooklyn, N. Y.
- Preventive for Sap Stain.**
Church & Dwight Co., New York, N. Y.
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- Pulleys. (Friction Clutch.)**
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Caldwell & Son Co., H. W., Chicago, Ill.
Cresson Co., Geo. V., Philadelphia, Pa.
Dodge Manufacturing Co., Mishawaka, Ind.
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Saginaw Mfg. Co., Saginaw, Mich.
Salem Foundry & Machine Works, Salem, Va.

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Golden's Foundry & Machine Co., Columbus, Ga.
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Jeffrey Mfg. Co., The, Columbus, O.
Jones & Laughlin Steel Co., Pittsburgh, Pa.
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Link-Belt Co., Nictown (Philadelphia), Pa.
Nordyke & Marmon Co., Indianapolis, Ind.
Poodle Engineering & Machine Co., Baltimore, Md.
Schneid's Sons Co., J. S., Macon, Ga.
Standard Roller Bearing Co., Philadelphia, Pa.
Woods' Sons Co., T. B., Chambersburg, Pa.
Pumps. (Air Lift.)
Harris Air Pump Co., Indianapolis, Ind.

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Alberger Pump Co., New York, N. Y.
American Well Works, Aurora, Ill.
Atlantic Hydraulic Mach. Co., Philadelphia, Pa.
Buffalo Forge Co., Buffalo, N. Y.
De Laval Steam Turbine Co., Trenton, N. J.
Erie Pump & Engine Works, Erie, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
Morris Machine Works, Baldwinville, N. Y.
Southward Fdry. & Mach. Co., Philadelphia, Pa.
Wheeler Condenser & Engr. Co., New York, N. Y.
Wood & Co., R. D., Philadelphia, Pa.
Worthington, H. R., New York, N. Y.

Pumps. (Hydraulic.)
American Well Works, Aurora, Ill.
Buffalo Steam Pump Co., Buffalo, N. Y.
Cardwell Machine Co., Richmond, Va.
Dean Bros. Steam Pump Wks., Indianapolis, Ind.
Goulds Mfg. Co., Seneca Falls, N. Y.
Lucas Pump Co., Dayton, Ohio.
Watson-Stilman Co., New York, N. Y.
Worthington, H. R., New York, N. Y.

Pumps. (Lift and Force.)
American Well Works, Aurora, Ill.
Goulds Mfg. Co., Seneca Falls, N. Y.
Ingersoll-Rand Co., New York, N. Y.
Lucas Pump Co., Dayton, Ohio.

Pumps. (Odorous and Excavating.)
Goulds Mfg. Co., Seneca Falls, N. Y.

Pumps. (Pneumatic.)
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Harris Air Pump Co., Indianapolis, Ind.
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Blake Mfg. Co., The Geo. F., New York, N. Y.
Cameron Steam Pump Wks., A. S., New York, N. Y.
Dean Bros. Steam Pump Wks., Indianapolis, Ind.
Goulds Mfg. Co., Seneca Falls, N. Y.
McGowan Co., John H., Cincinnati, O.
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Myers & Bros., F. E., Ashland, O.
Park Mfg. Co., Charlotte, N. C.
Platt Iron Works Co., Boston, O.
Union Steam Pump Co., Battle Creek, Mich.
Worthington, H. R., New York, N. Y.

Pumps. (Rectary.)
Goulds Mfg. Co., Seneca Falls, N. Y.
McGowan Co., John H., Cincinnati, O.

Pumps. (Steam.)
American Well Works, Aurora, Ill.
Blakeslee Mfg. Co., Du Quoin, Ill.
Buffalo Steam Pump Co., Buffalo, N. Y.
Cameron Steam Pump Wks., A. S., New York, N. Y.
Cameron & Barkley Co., Charleston, S. C.
Cook Well Co., The, St. Louis, Mo.
Dean Bros. Steam Pump Wks., Indianapolis, Ind.
Du Bois Iron Works, Du Bois, Pa.
Fairbanks, Morse & Co., Chicago, Ill.
Gibbs Machinery Co., Columbus, S. C.
Goulds Mfg. Co., Seneca Falls, N. Y.
Keystone Pump & Well Eng. Co., Beaver Falls, Pa.
Knowles Steam Pump Works, New York, N. Y.
McGowan Co., John H., Cincinnati, O.
Murray Iron Works Co., Burlington, Iowa.
Price Machinery Co., S. M., Norfolk, Va.
Sydney Pump & Well Co., Richmond, Va.
Union Steam Pump Co., Battle Creek, Mich.
Wheeler Condenser & Engr. Co., New York, N. Y.
Worthington, H. R., New York, N. Y.

Pumps. (Trench.)
Goulds Mfg. Co., Seneca Falls, N. Y.

Pumps. (Vacuum.)
Alberger Pump Co., New York, N. Y.
Dean Bros. Steam Pump Wks., Indianapolis, Ind.
Goulds Mfg. Co., Seneca Falls, N. Y.
Union Steam Pump Co., Battle Creek, Mich.
Wheeler Condenser & Engr. Co., New York, N. Y.

Pumping Machinery.
American Well Works, Aurora, Ill.
Atlantic Hydraulic Mach. Co., Philadelphia, Pa.
Blake Mfg. Co., The Geo. F., New York, N. Y.
Blakeslee Mfg. Co., Du Quoin, Ill.
Cameron Steam Pump Wks., A. S., New York, N. Y.
Cook Well Co., The, St. Louis, Mo.
Dean Bros. Steam Pump Wks., Indianapolis, Ind.
Deane Steam Pump Co., Holyoke, Mass.
Deming Co., Salem, Ohio.
Du Bois Iron Works, Du Bois, Pa.
Goulds Mfg. Co., Seneca Falls, N. Y.
Keystone Pump & Well Eng. Co., Beaver Falls, Pa.
Knowles Steam Pump Works, New York, N. Y.
Lucas Pump Co., Dayton, Ohio.
Moffatt Machinery Mfg. Co., Charlotte, N. C.
Morris Machine Works, Baldwinville, N. Y.
Myers & Bros., F. E., Ashland, O.
Park Mfg. Co., Charlotte, N. C.
Platt Iron Works Co., Dayton, O.
Sanitary Pump Co., Dayton, Ohio.
Schultz, Louis F., Syracuse, Md.
Sydney Pump & Well Co., Richmond, Va.
Union Steam Pump Co., Battle Creek, Mich.
Wood & Co., R. D., Philadelphia, Pa.
Worthington, H. R., New York, N. Y.

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Bertach & Co., Cambridge City, Ind.
Bliss Co., E. W., Brooklyn, N. Y.
Covington Machine Co., Covington, Va.
Ryersford Foundry & Mach. Co., Ryersford, Pa.

Pyrites Burners.
Caroline Iron Works, Baltimore, Md.

Quarrying and Stonecutting Machinery.
Ingersoll-Rand Co., New York, N. Y.

Railroads. (Agricultural and Industrial Opportunities.) [See Industrial, Agricultural and Commercial Opportunities.]

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American Locomotive Co., New York, N. Y.
American Valve & Meter Co., Cincinnati, O.
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Bailey-Lebby Co., The, Charleston, S. C.
Baldwin Equipment & Supply Co., Chicago, Ill.
Birmingham Rail & Loco. Co., Birmingham, Ala.
Block Polak Iron Co., Chicago, Ill.
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Cincinnati Equipment Co., Cincinnati, O.
Cincinnati Frog & Switch Co., Cincinnati, O.
Fairbanks, Morse & Co., Chicago, Ill.
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Manning, Maxwell & Moore, Inc., New York, N. Y.
McClary-Jemison Mch. Co., Birmingham, Ala.
National Iron & Steel Co., Houston, Tex.
New York Switch & Crossing Co., Hoboken, N. J.
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Reed Co., Howard W., Philadelphia, Pa.
Robinson & Orr, Pittsburgh, Pa.
Smith-Courtney Co., Richmond, Va.
Southern Iron & Equipment Co., Atlanta, Ga.
Steel Rail Supply Co., The, New York, N. Y.
United States Rail & Steel Co., Cumberland, Md.
Vulcan Iron Works, Wilkes-Barre, Pa.
Weir Frog Co., Cincinnati, O.
West Virginia Rail Co., The, Huntington, W. Va.
Wilson & Co., E. H., Philadelphia, Pa.
Zelnicke Supply Co., Walter A., St. Louis, Mo.

Railroad Frogs and Switches.
American Frog & Switch Co., Hamilton, O.
Bowen, Joseph E., Norfolk, Va.
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Orenstein-Arthur Koppel Co., Pittsburgh, Pa.
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Sweet's Steel Co., Williamsport, Pa.
Weir Frog Co., Cincinnati, O.

Rails. (Steel.)
Baldwin Equipment & Supply Co., Chicago, Ill.
Block-Polak Iron Co., Chicago, Ill.
Bowen, Joseph E., Norfolk, Va.
Continental Iron & Steel Co., New York, N. Y.
Frank, M. K., Pittsburg, Pa.
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Hyde Bros. & Co., Pittsburgh, Pa.
Lewis & Co., Henry, Philadelphia, Pa.
Maclear, J. H., Suffolk, Va.
National Iron & Steel Co., Houston, Tex.
Orenstein-Arthur Koppel Co., Pittsburgh, Pa.
Republic Steel & Iron Co., Pittsburgh, Pa.
Richardson & Co., Inc., Pittsburgh, Pa.
Robinson & Orr, Pittsburgh, Pa.
Southern Iron & Equipment Co., Atlanta, Ga.
Steel Rail Supply Co., The, New York, N. Y.
Sweet's Steel Co., Williamsport, Pa.
Tennessee Coal, Iron & R. R. Co., Birmingham, Ala.
United States Rail & Steel Co., Cumberland, Md.
West Virginia Rail Co., The, Huntington, W. Va.
Zelnicke Supply Co., Walter A., St. Louis, Mo.

Rail Braces, Crossings, etc. [See R. R. Frogs and Switches.]

Rail Joint Lock.
U. S. Metal & Mfg. Co., New York, N. Y.

Railroads. (Passenger Department.)
Chicago & Alton Railroad, Chicago, Ill.
Illinois Central Railroad, Chicago, Ill.

Rams. (Hydraulic.) [See Hydraulic Rams.]

Reamers.
Morse Twist Drill & Mch. Co., New Bedford, Mass.

Reinforcing Bars.
Concrete-Steel Co., New York, N. Y.
Concrete Steel Engineering Co., New York, N. Y.
Franklin Steel Co., Franklin, Pa.
Inland Steel Co., Chicago, Ill.

Rim Bending Machinery.
Root Co., B. M., York, Pa.

Riveters. (Pneumatic.)
Chicago Pneumatic Tool Co., Chicago, Ill.
Independent Pneumatic Tool Co., Chicago, Ill.
Ingersoll-Rand Co., New York, N. Y.

Road Machinery.
Austin-Western Co., Ltd., The, Chicago, Ill.
Berly-Hardy Co., Inc., Louisville, Ky.
Buffalo Steam Roller Co., Buffalo, N. Y.
Case Threshing Mach. Co., J. I., Racine, Wis.
Farquhar Co., A. B., York, Pa.
Huber Mfg. Co., The, Marion, O.
Iroquois Iron Works, Buffalo, N. Y.
Kelly Springfield Roller Co., Springfield, O.
Kilbourne & Jacobs Mfg. Co., Columbus, O.
Southern Mch. & Equipment Co., Lynchburg, Va.
Syracuse Chilled Plow Co., Syracuse, N. Y.
Topping, Howell, New York, N. Y.
Universal Road Mch. Co., New York, N. Y.

Roadmaking Materials.
Barber Asphalt Paving Co., Philadelphia, Pa.
Standard Oil Co., Inc., Road Oil Dept.
Texas Co., The, New York, N. Y.

Road Roller. (Steam.)
Austin-Western Co., Ltd., The, Chicago, Ill.
Avery Co., Peoria, Ill.
Buffalo Steam Roller Co., Buffalo, N. Y.
Case Threshing Mach. Co., J. I., Racine, Wis.
Farquhar Co., A. B., York, Pa.
Huber Mfg. Co., The, Marion, O.
Iroquois Iron Works, Buffalo, N. Y.
Kelly Springfield Roller Co., Springfield, O.
Universal Road Mch. Co., New York, N. Y.

Road Oil.
Gulf Refining Co., Pittsburgh, Pa.
Standard Oil Co., Inc., Road Oil Dept.
Texas Co., The, New York, N. Y.

Road Oilers. (Asphalt, Oil and Tar.)
Topping, Howell, New York, N. Y.

Road Preservative.
Gulf Refining Co., Pittsburgh, Pa.
Standard Oil Co., Inc., Road Oil Dept.
Texas Co., The, New York, N. Y.

Rock Crushers. [See Crushers, Rock.]

Roller Bearings.
Ryersford Fdry. & Mach. Co., Ryersford, Pa.
Standard Roller Bearing Co., Philadelphia, Pa.

Rolls. (Bending and Straightening.)
Bertach & Co., Cambridge City, Ind.
Covington Machine Co., Covington, Va.

Roofers' and Tinner's Supplies.
Merchant & Evans Co., Philadelphia, Pa.

Roofing. (Felt, Tar, Asbestos, Asphalt, Tin, etc.)
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Armstrong Mfg. Co., Richmond, Va.
Barber Asphalt Paving Co., Philadelphia, Pa.
Barrett Mfg. Co., Philadelphia, Pa.
Bird & Son, F. W., East Walpole, Mass.
Cameron & Barkley Co., Charleston, S. C.
Carolina Portland Cement Co., Charleston, S. C.

Huttig Mfg. Co., Muscatine, Iowa.
Johns-Manville Co., H. W., New York, N. Y.
Knowles & Co., Inc., Frank A., Baltimore, Md.
New Orleans Roofing & Metal Co., New Orleans, La.
Scott Roofing & Mfg. Co., Cincinnati, O.
Standard Paint Co., New York, N. Y.
Warren-Ehret Co., Philadelphia, Pa.

Roofing. (Metal Shingles.) [See Shingles, Metal.]
Burris & Son, John T., Anderson, S. O.
Cortright Metal Roofing Co., Philadelphia, Pa.
Edwards Mfg. Co., The, Cincinnati, O.

Roofing. (Reinforced Concrete.)
Clinton Wire Cloth Co., Boston, Mass.
Trussed Concrete Steel Co., Detroit, Mich.

Roofing. (Slate.)
East Bangor Consol. Slate Co., East Bangor, Pa.
Galt & Sons, John, New York, N. Y.
Genuine Bangor Slate Co., Easton, Pa.
Hower, J. K., Slattington, Pa.
Johnson, E. J., New York, N. Y.
Kansas City Slate & Tile Roof Co., Kansas City, Mo.

Roofing and Siding. (Metal.)
American Rolling Mill Co., Middletown, O.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Berger Mfg. Co., The, Canton, O.
Burris & Son, John T., Anderson, S. O.
Cameron & Barkley Co., Charleston, S. C.
Cortright Metal Roofing Co., Philadelphia, Pa.
Dixie Culvert & Metal Co., Atlanta, Ga.
Edwards Mfg. Co., The, Cincinnati, O.
New Orleans Roof & Metal Wks., New Orleans, La.
Scott Roofing & Mfg. Co., Cincinnati, O.
Youngstown Sheet & Tube Co., Youngstown, O.

Roofing Nails.
Weather Proofing Nail Co., Baltimore, Md.

Roofing Tile.
Kansas City Slate & Tile Roof Co., Kansas City, Mo.

Rope.
American Mfg. Co., New York, N. Y.
Broderick & Bascom Rope Co., St. Louis, Mo.
Columbian Rope Co., Auburn, N. Y.
Plymouth Cordage Co., North Plymouth, Mass.
Puritan Cordage Mills, Louisville, Ky.

Rope. (Transmission.)
American Mfg. Co., New York, N. Y.
Broderick & Bascom Rope Co., St. Louis, Mo.
Caldwell Co., Inc., W. E., Louisville, Ky.
Columbian Rope Co., Auburn, N. Y.
Consolidated Cotton Duck Co., Baltimore, Md.
Dodge Manufacturing Co., Mishawaka, Ind.
Plymouth Cordage Co., North Plymouth, Mass.
Wood's Sons Co., T. B., Chambersburg, Pa.

Rope Drives.
Caldwell Co., Inc., W. E., Louisville, Ky.
Caldwell & Son, H. W., Chicago, Ill.
Cresson Co., Geo. V., Philadelphia, Pa.
Dodge Manufacturing Co., Mishawaka, Ind.
Jones & Laughlin Steel Co., Pittsburgh, Pa.
Wood's Sons Co., T. B., Chambersburg, Pa.

Rope Machinery.
Haskell-Dawes Machine Co., Boston, Mass.

Rubber Goods.
Eureka Fire Hose Mfg. Co., New York, N. Y.
New Jersey Car Sp'g & Rub. Co., Jersey City, N. J.
Voorhees Rubber Mfg. Co., Jersey City, N. J.

Rules. (Steel.)
Lufkin Rule Co., The, Saginaw, Mich.
Starrett Co., L. S., Athol, Mass.

Safes and Vaults.
York Safe & Lock Co., York, Pa.

Sand.
Arundel Sand & Gravel Co., Baltimore, Md.
Knoxville Sand & Supply Co., Knoxville, Tenn.

Sand Lime Brick Machinery.
American Clay Machinery Co., The, Bucyrus, O.
Aising Engineering Co., J. H., New York, N. Y.

Sand Rammers.
Chicago Pneumatic Tool Co., Chicago, Ill.

Sap Stain Preventive.
Church & Dwight Co., New York, N. Y.

Sash Bars.
Kawner Mfg. Co., Niles, Mich.
Volitz Manufacturing Co., St. Joseph, Mo.

Sash Operating Apparatus.
Cassidy, Isaac, Newark, N. J.

Saws.
Gibbs Machinery Co., Columbia, S. C.
Huther Bros. Saw Mfg. Co., Rochester, N. Y.
Root Co., B. M., York, Pa.
Smith & Macomber, H. B., Smithville, N. J.
Sydney Pump & Well Co., Richmond, Va.

Saws. (Band.)
Cordesman-Rechtin Co., Cincinnati, O.
Root Co., B. M., York, Pa.
Smith Machine Co., H. B., Smithville, N. J.

Saws. (Hack.)
Starrett Co., L. S., Athol, Mass.

Saws. (Metal.)
Hub Mch. Weldg. & Contg. Co., Phila., Pa.

Sawmill Dogs.
Soule Steam Feed Works, Meridian, Miss.

Sawmills.
American Sawmill Mch. Co., Hackettstown, N. J.
Chandler & Taylor Co., Indianapolis, Ind.
Columbian Iron Works, Chattanooga, Tenn.
Farquhar Co., A. B., Ltd., York, Pa.
Gainesville Iron Works, Gainesville, Ga.
Hench & Dromgold Co., The, York, Pa.
Stockell-Myers Co., Petersburg, Va.

Sawmill Machinery.
Bailey-Lebby Co., Charleston, S. C.
Cameron & Barkley Co., Charleston, S. C.
Chase Turbine Mfg. Co., Orange, Mass.
Cordesman-Rechtin Co., Cincinnati, O.
Farquhar Co., Ltd., A. B., York, Pa.
Gibbs Machinery Co., Columbia, S. C.
Hench & Dromgold Co., York, Pa.
Lane Mfg. Co., Montpelier, Vt.
Mecklenburg Iron Works, Charlotte, N. C.
Price Mch. Co., S. M., Norfolk, Va.
Schneid's Sons Co., J. S., Macon, Ga.
Southern Engine & Boiler Works, Jackson, Tenn.
Sydney Pump & Well Co., Richmond, Va.
Union Iron Works Co., Selma, Ala.

Saw Sharpeners.
Abrasive Material Co., Philadelphia, Pa.
Carborundum Co., Niagara Fall, N. Y.
Norton Co., Worcester, Mass.
Vitrified Wheel Co., Westfield, Mass.

Saw Sharpeners and Files. (Cotton Gin.)
Carver Cotton Gin Co., East Bridgewater, Mass.

Saw Tables. (Metal.)
Hub Mach. Weldg. & Contg. Co., Phila., Pa.

Scales.
Howe Scale Co., New York, N. Y.
McDonald Bros. Pitless Scale Co., Pleasant Hill, Mo.
Standard Scale & Supply Co., Pittsburgh, Pa.

Scoops. (Grain, etc.)
Wyoming Shovel Works, Wyoming, Pa.

Screening Apparatus.
Sturtevant Mill Co., Boston, Mass.
Walker & Elliott, Wilmington, Del.

Screens. (Fly, Window and Door.)
New Jersey Wire Cloth Co., Trenton, N. J.

Screens. (Mining.)
Clinton Wire Cloth Co., Boston, Mass.

Screens. (Perforating.)
Cresson Co., Geo. V., Philadelphia, Pa.
Erdie Perforating Co., Rochester, N. Y.
Hendrick Mfg. Co., Carbondale, Pa.
Jeffrey Mfg. Co., The, Columbus, O.
Ludlow-Saylor Wire Co., The, St. Louis, Mo.
New Jersey Wire Cloth Co., Trenton, N. J.
Mundt & Sons, Charles, Jersey City, N. J.
McLanahan-Stone Mach. Co., Hollidaysburg, Pa.

Searchlights.
Schroeder Headlight Co., Evansville, Ind.

Separators. (Dust.)
American Blower Co., Detroit, Mich.
Buffalo Steam Pump Co., Buffalo, N. Y.
Raymond Bros. Impact Pulv. Co., Chicago, Ill.
Savannah Blow Pipe Co., Savannah, Ga.
Sturtevant Co., B. F., Hyde Park, Mass.
Tennessee Blow Pipe Co., Inc., Chattanooga, Tenn.

Sewer Pipe Grates.
Burr & Co., E. N., Champaign, Ill.

Sewer Pipe Machinery.
American Clay Machinery Co., The, Bucyrus, O.
Taplin-Rice-Clerkin Co., Akron, O.

Sewer Pipe. (Vitrified.)
Carolina Portland Cement Co., Charleston, S. C.
Pomona Terra-Cotta Co., Pomona, N. C.
Southern Sewer Pipe Co., Birmingham, Ala.
Stevens Sons Co., H., Macon, Ga.

Shafting. (Polished Steel.)
Jones & Laughlin Steel Co., Pittsburgh, Pa.

Shafting. (See Pulleys, Shafting and Hangers.)

Shapers.
Stephens Shaper Co., The, Cincinnati, O.

Sharpening Stones.
Norton Co., Worcester, Mass.
Vitrified Wheel Co., Westfield, Mass.

Shears. (Metal.)
Covington Machine Co., Covington, Va.
Ryersford Fdry. & Mach. Co., Ryersford, Pa.

Sheet Metal Working Machinery.
Bliss Co., E. W., Brooklyn, N. Y.

Sheet Metal Working.
Wyoming Shovel Works, Wyoming, Pa.

Sheet Brass and Copper.
Merchant & Evans Co., Philadelphia, Pa.

Sheet Steel and Iron.
Allegheny Steel Co., Pittsburgh, Pa.
American Rolling Mill Co., Middletown, O.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Berger Mfg. Co., The, Canton, O.
La Belle Iron Works, Steubenville, O.
Republic Iron & Steel Co., Pittsburgh, Pa.
Stark Rolling Mill Co., Canton, O.
Tennessee Coal, Iron & R. R. Co., Birmingham, Ala.
Wood Iron & Steel Co., Alan, Philadelphia, Pa.
Youngstown Sheet & Tube Co., The, Youngstown, O.

Shingles. (Metal.)
Burris & Son, John T., Anderson, S. O.
Cortright Metal Roofing Co., Philadelphia, Pa.
Edwards Mfg. Co., Cincinnati, O.

Shipbuilders. (Iron and Steel.)
Newport News Shipbuilding & Drydock Co., Newport News, Va.

Shipping Tags.
Dennison Mfg. Co., Boston, Mass.

Shovels. (R. R. Contractors', Fdry., Mill, etc.)
Wyoming Shovel Works, The, Wyoming, Pa.

Shredders. (Bark, Chip, etc.)
Williams Pat. Crush. & Pul. Co., The, Chicago, Ill.

Shutters. (Iron.)
Bolles Iron & Wire Works, J. E., Detroit, Mich.
Chesapeake Iron Works, Baltimore, Md.

Shutters. (Sagax Wood.)
Sagax Wood Co., Baltimore, Md.

Shutters. (Steel Rolling.)
Kline Mfg. Co., Columbus, O.

Shutters. (Tin Clad.)
Victor Mfg. Co., Newburyport, Mass.

Sidewalk Lights.
Berger Mfg. Co., The, Canton, O.
Bruner Granitoid Co., P. M., St. Louis, Mo.

Silk and Ramia Nolls.
Wolf & Sons, W., Boston, Mass.

Sizing.
Stricker & Co., Henry H., Baltimore, Md.

Skylights, Cornices, etc.
Carolina Corn. & Skylight Co., Greensboro, N. C.

Slate. (Structural, Sanitary, etc.)
East Bangor Consol. Slate Co., East Bangor, Pa.
Genuine Bangor Slate Co., Easton, Pa.
Hower, J. K., Slattington, Pa.

Slate's Tools.
Galt & Sons, John, New York, N. Y.

Sluice Gates and Appliances.
Coldwell-Wilcox Co., Newburgh, N. Y.

Smokestacks. (Iron and Steel.)
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Dixie Culvert & Metal Co., Atlanta, Ga.
Keeler Co., E., Williamsport, Pa.
Lombard Iron Works, Augusta, Ga.
New Orleans Roof & Metal Co., New Orleans, La.
Petroleum Iron Works Co., Sharon, Pa.
Schneid's Sons Co., J. S., Macon, Ga.
Virginia Bridge & Iron Co., Roanoke, Va.
Wilmington Iron Works, Wilmington, N. C.

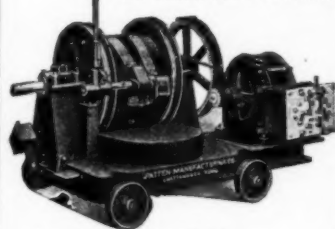
Spikes. [See Nails and Spikes.]

Springs. (Machinery, Railway, Spiral.)
American Spiral Spring & Mfg. Co., Pittsburgh, Pa.
Gary Spring Works, New York, N. Y.
Ludlow-Saylor Wire Co., The, St. Louis, Mo.
Raymond Mfg. Co., Ltd., Corry, Pa.

Springs. (Vanadium.)
American Vanadium Co., Pittsburgh, Pa.

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VARIABLE SPEED
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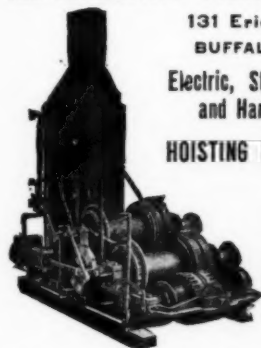
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It is the most economical on the market, producing a light of 8000 candle power for twelve hours, at a cost of about 5c. an hour. It does not smoke, sputter, flicker nor smell, and is steady, powerful and reliable at all times. The flame is so stiff that it cannot be extinguished by the wind.

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LOGGING CARS

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RALEIGH, N. C.

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SCRAPER BUCKET MACHINES



Are most economical, requiring one operator, one fireman and two laborers on the ground, who accomplish as much as *four* steam shovels of same dipper capacity, or 100 teams with wagons, graders, etc.

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BULLETIN 501

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CLEVELAND, OHIO, U. S. A.

- Sprinklers.** (Automatic.)
Charlotte Contract Co., Charlotte, N. C.
General Fire Extinguisher Co., Providence, R. I.
- Stamp Mills.**
Mecklenburg Iron Works, Charlotte, N. C.
- Stamps.** (Brass, Rubber.)
Baltimore Office Supply Co., Baltimore, Md.
Bennett Rubber Stamp & Seal Co., Atlanta, Ga.
Dixie Seal & Stamp Co., Atlanta, Ga.
National Seal Works, Richmond, Va.
- Standpipes.**
Chattanooga Boiler & Tank Co., Chat'n'ga, Tenn.
Hartley Boiler Works, Montgomery, Ala.
Keeler Co., E., Williamsport, Pa.
Lookout Boiler & Mfg. Co., Chattanooga, Tenn.
Petroleum Iron Works Co., Sharon, Pa.
- Stationers.** (Envelopes, etc.)
Young & Selden Co., Baltimore, Md.
- Steam Feeds.**
Soule Steam Feed Works, Meridian, Miss.
- Steam Fitters' Supplies.**
Carpenter Tap & Die Co., J. M., Pawtucket, R. I.
General Fire Extinguisher Co., Providence, R. I.
Haudens' Sons, D., Yonkers, N. Y.
Schiffel's Sons Co., J. S., Macon, Ga.
- Steam Heating.**
General Fire Extinguisher Co., Providence, R. I.
Keeler Co., E., Williamsport, Pa.
Peck-Hammond Co., The, Cincinnati, O.
- Steamship Lines.**
Baltimore Steam Packet Co., Baltimore, Md.
Chesapeake Steamship Co., Baltimore, Md.
Merchant & Miners' Trans. Co., Baltimore, Md.
- Steam Separators.**
Amer. Radiator Co., Bundy Dept., New York, N. Y.
Lindstrom's Mach. Wks., John T., Allentown, Pa.
- Steam Shovels.** (See Excavating Machinery.)
- Steam Traps.**
Albany Steam Trap Co., Albany, N. Y.
American Blower Co., Detroit, Mich.
Amer. Radiator Co., Bundy Dept., New York, N. Y.
Jenkins Bros., New York, N. Y.
Lindstrom's Mach. Wks., John T., Allentown, Pa.
Sturtevant Co., B. F., Hyde Park, Mass.
- Steel.**
American Rolling Mill Co., Middletown, O.
Carnegie Steel Co., Pittsburgh, Pa.
Hoffman & Co., B. C., Baltimore, Md.
Jones & Laughlin Steel Co., Pittsburgh, Pa.
La Belle Iron Works, Steubenville, O.
Republic Iron & Steel Co., Pittsburgh, Pa.
Tennessee Coal, Iron & R. R. Co., Birm'gh'm, Ala.
Wood Iron & Steel Co., Alan, Philadelphia, Pa.
- Steels.** (Tool.)
Allen & Co., Ltd., Edgar, Chicago, Ill.
Jessop's Sons Steel Sales Co., Wm., St. Louis, Mo.
- Steel.** (Vanadium.)
American Vanadium Co., Pittsburgh, Pa.
Carnegie Steel Co., Pittsburgh, Pa.
- Steel Buildings.** (Designers, Builders.)
American Bridge Co. of New York, New York, N. Y.
Baltimore Bridge Co., Baltimore, Md.
Bartlett-Hayward Co., The, Baltimore, Md.
Chesapeake Iron Works, Baltimore, Md.
Farria Bridge Co., Pittsburgh, Pa.
Missouri Valley Bridge & Iron Co., Leavenworth, Kans.
Ritter-Conley Mfg. Co., Pittsburgh, Pa.
Schreiber & Sons Co., The, Cincinnati, O.
Sneed Architectural Iron Works, Louisville, Ky.
Virginia Bridge & Iron Co., Roanoke, Va.
- Steel Plants.** (Malleable and Steel.)
Whiting Foundry Equipment Co., Harvey, Ill.
- Steel Plate Work.**
Bartlett-Hayward Co., The, Baltimore, Md.
Casey-Hedges Co., Chattanooga, Tenn.
Chattanooga Boiler & Tank Co., Chat'n'ga, Tenn.
Hoffman & Co., R. C., Baltimore, Md.
Republic Iron & Steel Co., Pittsburgh, Pa.
Ritter-Conley Mfg. Co., Pittsburgh, Pa.
Tudor Boiler Mfg. Co., Cincinnati, O.
- Steel Protector.** (Concrete Curb Steps, etc.)
[See Protector Steel.]
- Steel Shapes.** (Pressed.)
Wyoming Shovel Works, Wyoming, Pa.
- Steel Sheet Piling.**
Carnegie Steel Co., Pittsburgh, Pa.
Jones & Laughlin Steel Co., Pittsburgh, Pa.
- Steering Gears.** (Steamboat.)
Duke Engine Co., Grand Haven, Mich.
- Stencils.**
Baltimore Office Supply Co., Baltimore, Md.
Bennett Rubber Stamp & Seal Co., Atlanta, Ga.
Dixie Seal & Stamp Co., Atlanta, Ga.
National Seal Works, Richmond, Va.
- Stills.** (Turpentine.)
Wilmington Iron Works, Wilmington, N. C.
- Stirrups.** (Building.)
Chesapeake Iron Works, Baltimore, Md.
- Stock Certificates, Bonds and Seals.**
Baltimore Office Supply Co., Baltimore, Md.
Dixie Seal & Stamp Co., Atlanta, Ga.
- Stokers.** (Mechanical.)
Babcock & Wilcox Co., New York, N. Y.
Harrisburg Fdry. & Mach. Wks., Harrisburg, Pa.
Westinghouse Machine Co., Pittsburgh, Pa.
- Storage Batteries.**
Lee Electric Co., Baltimore, Md.
Elec. Storage Battery Co., The, Philadelphia, Pa.
Westinghouse Machine Co., Pittsburgh, Pa.
- Store Fronts.**
Kawneer Manufacturing Co., Niles, Mich.
Volts Manufacturing Co., St. Joseph, Mo.
- Strainers.**
Cameron Steam Pump Wks., A. S., New York, N. Y.
- Structural Steel and Iron.**
American Bridge Co. of New York, New York, N. Y.
Baltimore Bridge Co., Baltimore, Md.
Bartlett-Hayward Co., The, Baltimore, Md.
Belmont Iron Works, Inc., Philadelphia, Pa.
Cates Mach. & Bridge Co., Burlington, N. C.
Chattanooga Iron & Wire Wks., Chat'n'ga, Tenn.
Chesapeake Iron Works, Baltimore, Md.
Des Moines Bridge & Iron Co., Des Moines, Iowa.
Hoffman & Co., R. C., Baltimore, Md.
Owego Bridge Co., Owego, N. Y.
Park Mfg. Co., Charlotte, N. C.
Republic Iron & Steel Co., Pittsburgh, Pa.
Ritter-Conley Mfg. Co., Pittsburgh, Pa.
Schreiber & Sons Co., The, Cincinnati, O.
Sneed Architectural Iron Works, Louisville, Ky.
Tennessee Coal, Iron & R. R. Co., Birm'gh'm, Ala.
Virginia Bridge & Iron Co., Roanoke, Va.
York Bridge Co., York, Pa.
- Studs and Furring.** (Steel.)
Berger Mfg. Co., The, Canton, O.
- Stump Pullers.**
Zimmerman Steel Co., Lone Tree, Iowa.
- Sugar-Cane Machinery.**
Pratt Engineering & Mach. Co., Atlanta, Ga.
- Sulphur.**
Union Sulphur Co., New York, N. Y.
- Super-Heaters.** (Steam.)
Babcock & Wilcox Co., New York, N. Y.
Power Specialty Co., New York, N. Y.
- Surveying Instruments.**
Keuffel & Esser, Hoboken, N. J.
Weber & Co., F., Philadelphia, Pa.
- Switchboards, Switches, etc.**
Doubleday-Hill Electric Co., Pittsburgh, Pa.
Fort Wayne Electric Works, Atlanta, Ga.
General Electric Co., Schenectady, N. Y.
Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.
- Switches.** (See Railroad Frogs and Switches.)
- Switchstands.**
American Valve & Meter Co., Cincinnati, O.
- Tags.**
Dennison Mfg. Co., Boston, Mass.
- Tanks.** (Iron and Steel.)
American Water Softener Co., Philadelphia, Pa.
Bartlett-Hayward Co., Baltimore, Md.
Caldwell Co., Inc., W. E., Louisville, Ky.
Casey-Hedges Co., Chattanooga, Tenn.
Chattanooga Boiler & Tank Co., Chat'n'ga, Tenn.
Cole Mfg. Co., R. D., Newnan, Ga.
Des Moines Bridge & Iron Co., Des Moines, Iowa.
Dixie Culvert & Metal Co., Atlanta, Ga.
Harry Bros. Co., Dallas, Texas.
Hartley Boiler Works, Montgomery, Ala.
Keeler Co., E., Williamsport, Pa.
Kennicott Co., Chicago Heights, Ill.
Lombard Iron Works, Augusta, Ga.
Lookout Boiler & Mfg. Co., Chattanooga, Tenn.
Panama Tank Co., New Orleans, La.
Petroleum Iron Works Co., Sharon, Pa.
Ritter-Conley Mfg. Co., Pittsburgh, Pa.
Schiffel's Sons Co., J. S., Macon, Ga.
Sydnor Pump & Well Co., Richmond, Va.
Tudor Boiler Mfg. Co., Cincinnati, O.
Vaik & Murdoch Iron Works, Charleston, S. C.
Virginia Bridge & Iron Co., Roanoke, Va.
Walsh & Weldner Boiler Co., Chattanooga, Tenn.
- Tanks.** (Wood.)
Baltimore Cooperage Co., Baltimore, Md.
Caldwell Co., Inc., W. E., Louisville, Ky.
Davis & Son, G. M., Palatka, Fla.
Sydnor Pump & Well Co., Richmond, Va.
- Taps and Dies.** (Pipe.)
Carpenter Tap & Die Co., J. M., Pawtucket, R. I.
- Tapes.** (Measuring.)
Keuffel & Esser, Hoboken, N. J.
Lufkin Rule Co., Saginaw, Mich.
Starrett Co., L. S., Athol, Mass.
Weber & Co., F., Philadelphia, Pa.
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Carroll's Portland Cement Co., Charleston, S. C.
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Lee Electric Co., Baltimore, Md.
Piedmont Electric Co., Asheville, N. C.
Western Electric Co., New York, N. Y.
- Telephone Cable.**
Western Electric Co., New York, N. Y.
- Telephone Poles.** [See Cross-ties.]
Western Electric Co., New York, N. Y.
- Terra-cotta.**
Atlanta Terra-Cotta Co., East Point, Ga.
Maryland Terra-Cotta Co., Baltimore, Md.
Pomona Terra-Cotta Co., Pomona, N. C.
Stevens' Sons Co., H., Macon, Ga.
- Threshers.**
Cardwell Machine Co., Richmond, Va.
- Tie Plates.** (Railways.)
Spencer Otis Co., Chicago, Ill.
Spencer Otis Co., Norfolk, Va.
- Title.** (Drain, Floor, etc.)
Oceone Brick & Tile Co., Milledgeville, Ga.
- Title.** (Mosaic.)
Southern Mosaic Tile Co., Birmingham, Ala.
- Timber Experts.**
Meier, F. R., New York, N. Y.
- Tin and Terne Plates.**
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Berger Mfg. Co., The, Canton, O.
Merchant & Evans Co., Philadelphia, Pa.
New Orleans Roof'g & Metal Co., New Orleans, La.
- Tin Cans.**
Southern Can Co., Baltimore, Md.
- Tobacco Machinery.**
Buckeye Iron & Brass Works, Dayton, O.
Cardwell Machine Co., Richmond, Va.
Grote Manufacturing Co., F., Evansville, Ind.
- Tool Steels.**
Allen & Co., Ltd., Edgar, Chicago, Ill.
Jessop's Sons Steel Sales Co., Wm., St. Louis, Mo.
- Tools.** (Hydraulic.)
Watson-Stillman Co., New York, N. Y.
- Tools.** (Machinist's.)
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Chicago Pneumatic Tool Co., Chicago, Ill.
Independent Pneumatic Tool Co., Chicago, Ill.
Ingersoll-Rand Co., New York, N. Y.
McKiernan Drill Co., New York, N. Y.
Pittsburgh Pneumatic Co., Canton, O.
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U. S. Marine Signal Co., New York, N. Y.
- Towers.** (Steel and Wood.)
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Caldwell Co., Inc., W. E., Louisville, Ky.
Chattanooga Boiler & Tank Co., Chat'n'ga, Tenn.
Cole Mfg. Co., R. D., Newnan, Ga.
Des Moines Bridge & Iron Co., Des Moines, Iowa.
Lookout Boiler & Mfg. Co., Chattanooga, Tenn.
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Avery Co., Peoria, Ill.
Case Threshing Mach. Co., J. I., Racine, Wis.
Huber Mfg. Co., Marion, O.
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Whiting Foundry Equipment Co., Harvey, Ill.
- Tramway.** (Wire Rope.)
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Cresson Co., Geo. V., Philadelphia, Pa.
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Lidgerwood Mfg. Co., New York, N. Y.
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Howe Scale Co., New York, N. Y.
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- Tube Well Strainers.**
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National Tube Co., Pittsburgh, Pa.
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National Tube Co., Pittsburgh, Pa.
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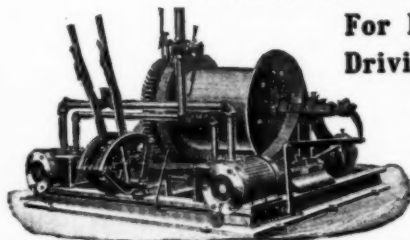
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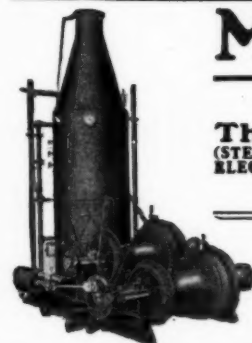
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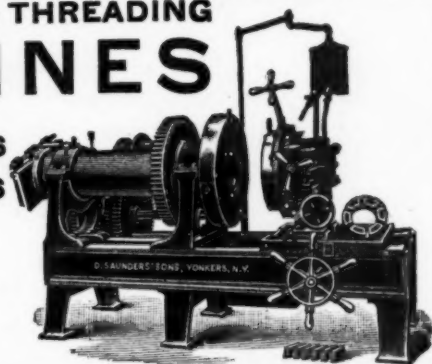


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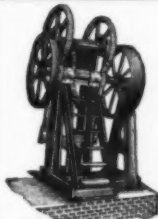
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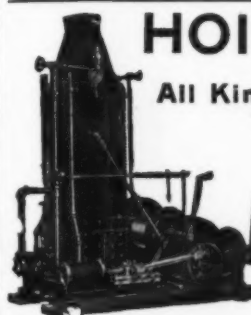


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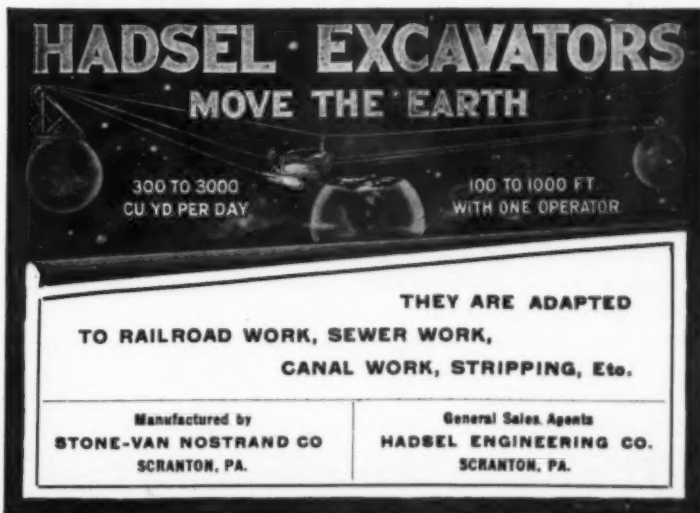
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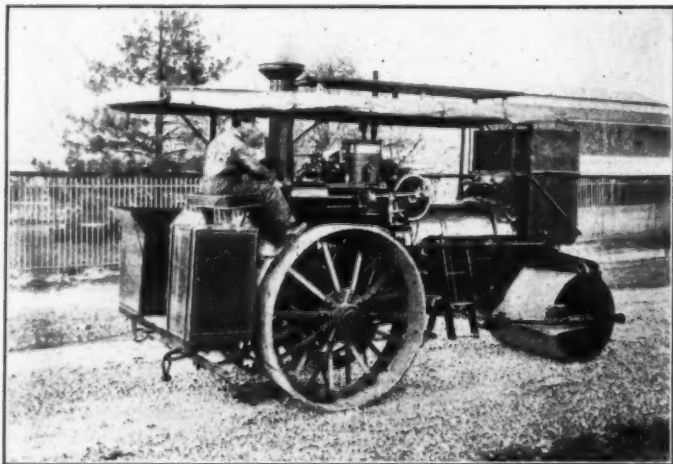
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Are Good Enough for Me—

Song of the Troy Dump Box



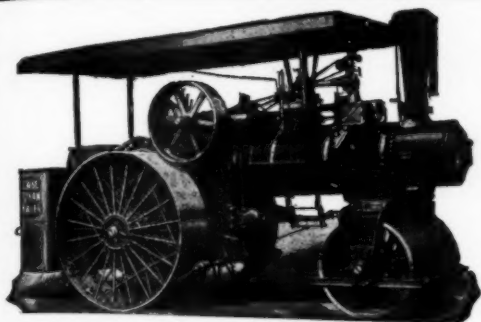
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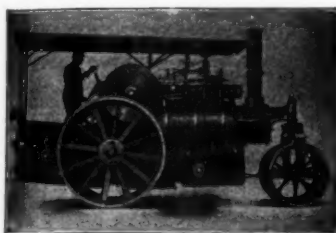
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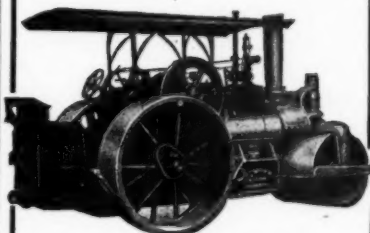
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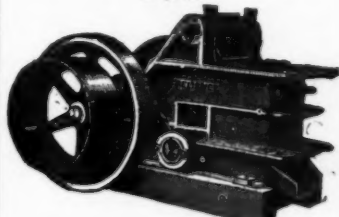
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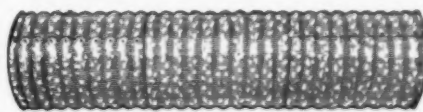
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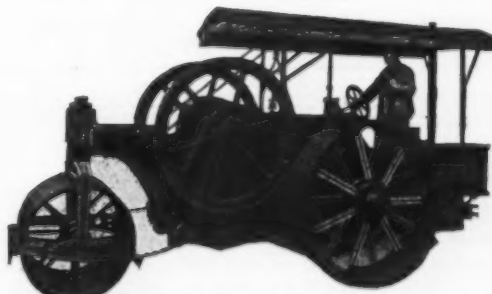
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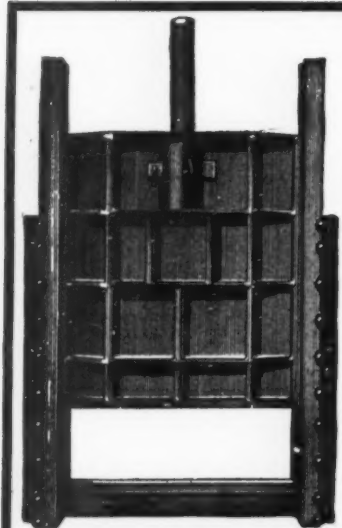
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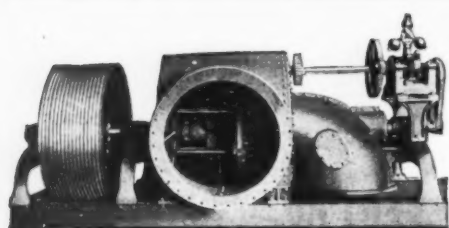
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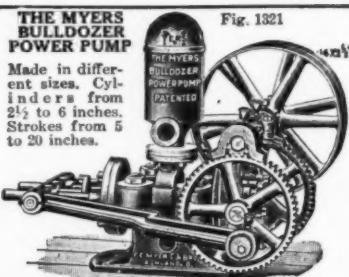
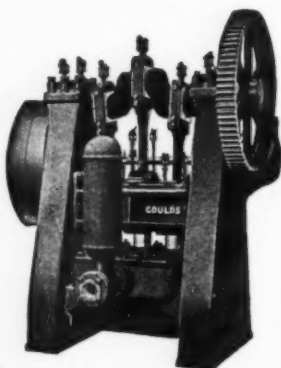
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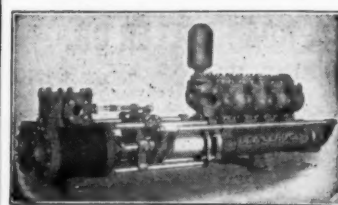
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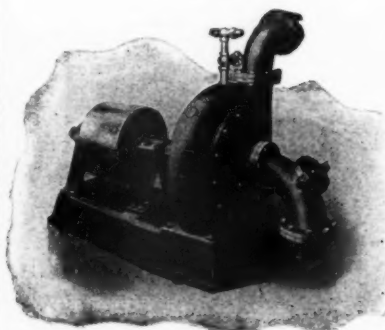
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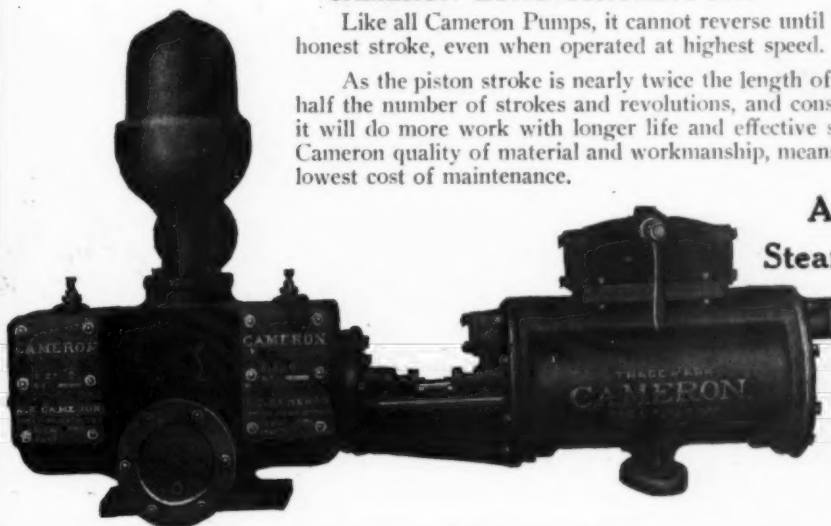
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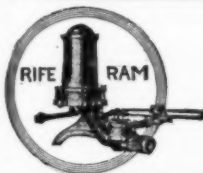
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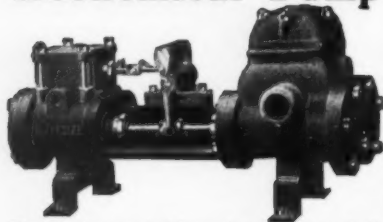
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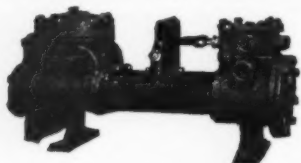
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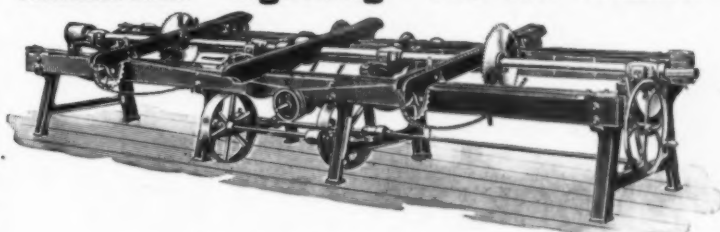


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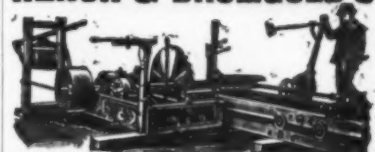
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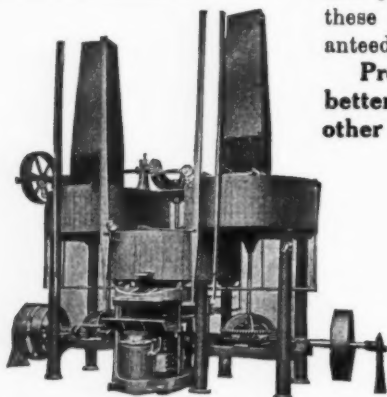
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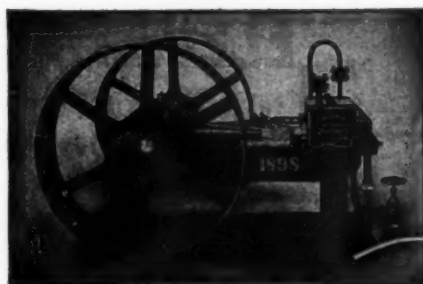
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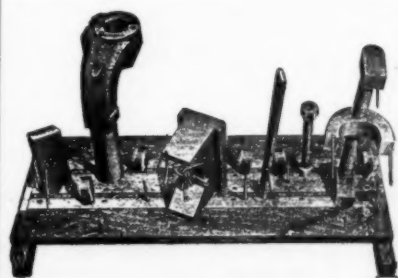
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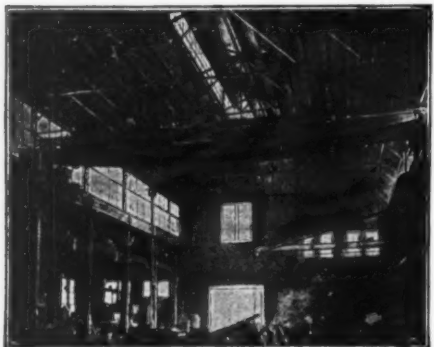


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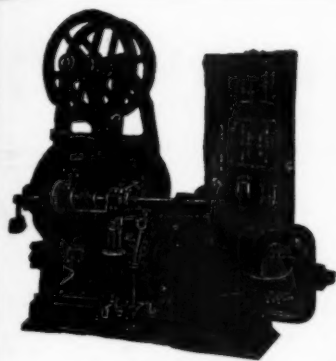
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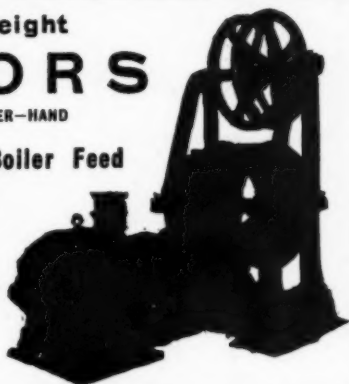
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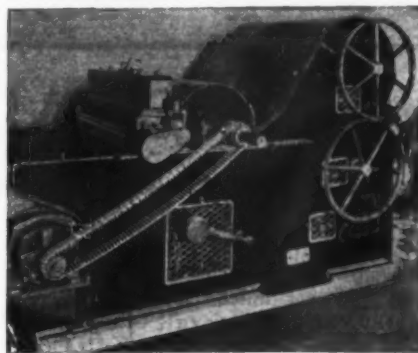
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PT-10

C-W Induction Motors make good in cotton mills



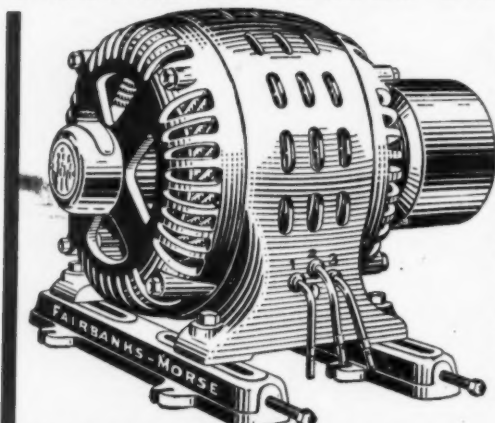
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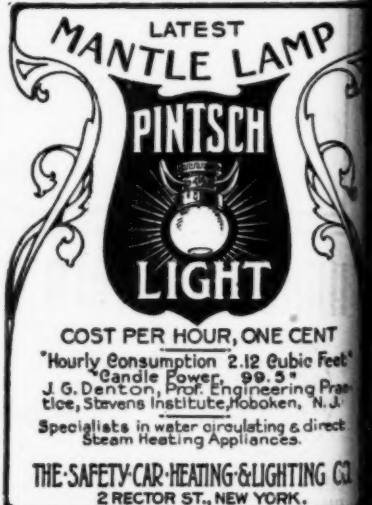
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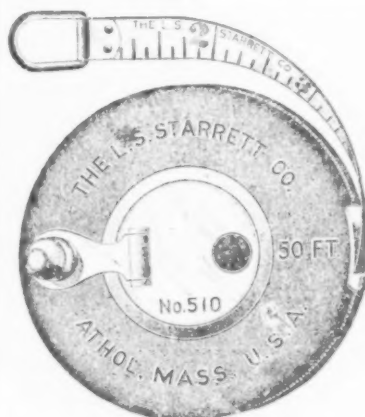
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Ala., Russellville.—The bonds recently voted, it is reported, are \$350,000 school and \$700,000 funding 5 per cents.

Ark., Fort Smith.—The Fort Smith and Van Buren Bridge district, it is reported, will sell about October 15 \$625,000 of bonds.

Ark., Morrilton.—\$25,000 of 6 per cent. school bonds are reported to have been recently sold to the Wm. R. Compton Company of St. Louis; denomination \$500.

Fla., Lakeland.—\$18,000 of light and water improvement and \$22,000 of water-main-extension bonds are reported sold to the State of Florida. N. A. Riggins, L. F. Henley and C. W. Deen are bond trustees.

Fla., Port Tampa.—\$25,000 of 5 per cent. 20-year water-works bonds are being offered. R. E. Davis is City Clerk.

Ga., Adel.—\$7500 of water-main-extension bonds are reported voted.

Ga., Americus.—It is contemplated, according to a report, to issue bonds to extend sewers.

Ga., Cordele.—An election is called for September 23 to vote on \$10,000 of O'Neal High School addition bonds.

Ga., Eastman.—The bonds voted August 18 are reported thus: \$30,000 sewer, \$18,000 school, \$10,000 water.

Ga., Eastman.—\$50,000 of town bonds for sewers and school purposes are reported voted August 18.

Ga., Dalton.—All bids are reported to have been rejected for the \$125,000 of 5 per cent. municipal improvement bonds offered on August 19. They will again be offered. Paul B. Trammell is Mayor.

Ga., Franklin.—Election called in Heard county for August 23 on \$40,000 road and \$20,000 bridge 5 per cent. bonds.

Ga., Gainesville.—All bids are reported rejected for the 4 per cent. 30-year bonds offered June 25. They are \$70,000 water-works, \$12,500 sewer, \$12,500 school and \$5,000 electric light. R. D. Mitchell is Mayor.

Ga., Sparta.—Official: \$40,000 of 5 per cent. 30-year bonds, dated January 1, 1911, are authorized for water-works and sewerage; denomination \$500 each; date not set for bids. John D. Walker, Mayor, is in charge. W. H. Stansell is City Clerk and Treasurer.

Ga., Waycross.—Reported that a vote will be taken immediately on \$250,000 of 5 per cent. bonds.

Ky., Brooksville.—The Bracken County Fiscal Court is reported to have ordered an election on \$35,000 of 4 per cent. courthouse-building bonds.

Ky., Hyden.—Bids are being received for \$500 of 6 per cent. 20-year school-building bonds; denomination \$500 each. H. M. Brock is secretary of the Board of Education.

Ky., Newport.—Election called for August 20 on \$4000 school-building-addition bonds.

Ky., Winchester.—Bids are being received until 1 P. M. August 30 for \$65,000 of sewer bonds. J. A. Hughes is Mayor and Dr. M. S. Brown chairman of the sewer committee.

La., Greenwood.—Bids will be received, it is reported, for \$24,000 of 6 per cent. 11-20-year drainage bonds of Lake Henry Irrigation district; denomination \$500 each. G. W. Holmes is district president.

Ky., Guthrie.—Official: Guthrie Graded Common School district will issue about \$8000 of 5 per cent. 20-year bonds of \$500 denomination to purchase school building and apparatus. Date to receive bids not yet fixed. W. C. Balee is secretary of the School Board.

La., Baton Rouge.—The Governor has approved the bill (says a dispatch) for the issue of \$6,500,000 of bonds for the Panama Exposition, and the issue will be voted on by the people in November.

La., Baton Rouge.—It is contemplated to issue bonds in Baton Rouge and East Baton Rouge parish for a new courthouse and jail, good roads and improved drainage. At a mass-meeting representatives of the country districts declared for the issue only upon condition that one-half of it should be for roads and drainage. The amount is yet undecided. Joseph Gebelin is president of the Police Jury.

La., Slidell.—It is contemplated, according to a report, to issue school and water-works bonds. The City Clerk may be addressed.

Md., Crisfield.—Bids will be received, it is reported, until 2:30 P. M. September 14 for \$15,000 of 4½ per cent. (13½-year average) city bonds. W. Dougherty is City Clerk.

Md., Frederick.—Bids will be received until noon on September 26 for \$75,000 of 4½ per cent. 20-30-year Frederick county bonds; denomination \$100 to \$1000. W. H. Hogarth is president and M. D. Harp clerk of the County Commissioners.

Mo., Fulton.—Bids are being received, it is

reported, until noon August 25 for \$19,000 of heat and repair and \$5000 building 5 per cent. bonds of Fulton school district; denomination \$500. Dr. M. Yates is Treasurer.

Miss., Laurel.—Official notice is given to taxpayers that unless 20 per cent. of their number protest the Mayor and Aldermen will, at their meeting on September 6, order an issue of \$150,000 of bonds to secure the location of the Mississippi Normal College at Laurel.

Miss., Mendenhall.—Reported that the \$7000 of high-school building bonds will not be offered for sale until after September 10.

Miss., Meridian.—Official: \$275,000 of public-improvement bonds, denomination \$1000, rate of interest not yet fixed, have been voted, but not yet issued. C. W. O'Leary is City Clerk. The issue will be used thus: School buildings, \$100,000; new city hall, \$75,000; drainage, \$50,000; fire department, \$15,000; parks, \$15,000; sanitary sewers, \$10,000; sidewalk improvements, \$10,000.

Miss., Meridian.—Official: Bids will be opened September 6 at 2 P. M. for \$200,000 of 5 per cent. good-roads bonds, dated September 1; denomination \$500. The first installment of \$50,000 will mature in 1922 to 1925, inclusive. W. R. Pistole is clerk and J. H. Kennedy president of the board.

Miss., Moss Point.—The \$15,000 of 6 per cent. 20-year street-improvement bonds, denomination \$1000, offered August 2 and not sold, are again being offered. C. M. Fairley is City Clerk.

Miss., New Albany.—Districts 1, 2 and 3 of this (Union) county are reported to have voted bonds for good roads on August 19.

Miss., Osyka.—The city has voted to issue \$20,000 of water-works and electric-light bonds. Clinton Thompson is Mayor.

Mo., Butler.—The \$35,000 of 4½ per cent. 5-20 high-school building bonds offered August 10 were not sold, it is reported, and they are now being offered privately. W. O. Atkeson is secretary of the School Board.

Mo., Springfield.—It is contemplated to vote August 30 on the proposed issue of \$475,000 of bonds described August 18. R. E. Lee is Mayor.

Mo., Kansas City.—Bids are asked until 10 A. M. September 7 for class A bonds, 4 per cents, thus: \$300,000, water works; \$25,000, tuberculosis hospital; \$75,000, contagious-diseases hospital; also for class B bonds, 4½ per cents, thus: \$50,000, market-house; \$50,000, fire protection; \$15,000, public levee; \$25,000, workhouse; \$50,000, paving-repair plant; \$50,000, sewer; \$60,000, 12th St. traffic-way; \$100,000, bridge; denomination, \$1000 each; dated September 1; mature in 20 years. Darius A. Brown is Mayor and Gus Pearson City Comptroller.

Okla., Carmen.—Reported that an election will be held August 29 on \$15,000 of water-works and electric-light-extension bonds.

Okla., Calumet.—A dispatch says that \$10,000 of school-house bonds were voted August 18.

Okla., Cushing.—\$25,000 of 6 per cent. 25-year water-works bonds, offered June 20, are reported sold to W. C. Swanwick, Joplin, Mo.

Okla., Durant.—The Dallas Trust and Savings Bank of Dallas, Tex., is reported to have bought the following Durant (Okla.) bonds: \$10,000 of 5 per cent. bridge, \$20,000 of 6 per cent. water-works extension and \$20,000 of 6 per cent. electric light; denomination \$1000.

Okla., Durant.—An election is to be called, according to a dispatch, for vote on \$180,000 of Bryan county courthouse and jail bonds.

Okla., Helena.—Contemplated to call an election for electric light plant bonds.

Okla., Hobart.—Reported that \$102,874 of 6 per cent. improvement bonds have been disposed of at par to the Warren-Quinlan Asphalt Co. in payment for work.

Okla., Oklahoma City.—Reported that another issue of school bonds for \$90,000 is contemplated.

Okla., Krebs.—Reported that \$10,000 of water-main-extension bonds have been voted.

Okla., Konowa.—Bids will be received until 2 P. M. August 27 for \$10,000 of 6 per cent. 10-year improvement bonds; denomination \$1000 each. E. L. Burton is City Clerk.

Okla., Lawton.—Reported that bids will be received by W. J. Julian, City Clerk, until August 24 for \$200,000 reservoir, \$40,000 of water-works and \$40,000 of sewer 5 per cent. 25-year bonds.

Okla., Mannsville.—\$20,000 of water-works bonds are reported to have been voted.

Okla., Oklahoma City.—Ordinance is published for issue of \$5000 of 5 per cent. refunding bonds; denomination \$500; dated August 15.

Okla., Sayre.—An official is quoted as saying that all bids were rejected for the \$70,000 of 5 per cent. 16-year average courthouse and jail bonds of Beckham county offered August 10.

Okla., Yukon.—Bids will be received until Monday, September 5, for \$20,000 of water-works and \$10,000 of sewer 6 per cent. 25-year bonds. H. T. Burson is Mayor.

S. C., Aiken.—The second election for the \$78,000 of waterworks extension bonds held on August 16 resulted in favor of the bonds. J. B. Saller is Mayor.

S. C., Dillon.—Official: The town of Dillon will put on the market within sixty days \$15,000 of bonds for electric lights. Election has been ordered. N. B. Hargrove is Mayor.

S. C., McColl.—A report says that all bids were rejected for the \$20,000 of 5 per cent. 20-year school-building bonds offered August 15.

S. C., St. Matthews.—St. Matthews School District No. 8 of Calhoun county is reported contemplating an issue of \$3000 additional school bonds.

Tenn., Jellico.—The water and sewer bonds to be voted on September 1 aggregate \$90,000.

Tenn., Maryville.—All bids reported rejected for the \$30,000 of 5 per cent. 19½-year school bonds offered July 18. New bids are asked at any time. W. A. McTeer is city recorder.

Tenn., Memphis.—Ordinances are published for three proposed issues of street-improvement bonds. One is to be for \$275,000 and another for \$300,000, both at 4½ per cent.; denomination \$1000 each; dated August 1, 1910, and to run 35 years. It is also proposed to issue \$435,000 of 6 per cent. street-improvement bonds, also dated August 1, 1910; all to be paid off within five years in the proportion of one-fifth each year. J. M. Speed is acting Mayor and E. M. Douglas is City Clerk.

Tex., Alpine.—Official: \$6000 of 5 per cent. 20-year \$500 denomination bonds of common school district No. 3 of Brewster county are being offered for sale at par and interest. Bonds are approved and registered. E. F. Higgins, County Judge, Alpine, Tex., has charge.

Tex., Asherton.—Official: Bond election failed owing to technicality. Another election will be held in November for \$15,000 of 5-20s; may be 5 per cents. of \$100 denomination. Bids will be opened as soon as bonds can be approved; in December at the earliest. J. T. Williams is secretary of the School Board, which will dispose of the securities.

Tex., Austin.—The Attorney-General has approved bonds as follows: \$4000 Wilbarger county school district 15, 5 per cent. 10-20s; \$2000 De Witt county school district 28, 5 per cent. 5-20s; \$1500 De Witt county school district 26, 5 per cent. 10-20s; \$1000 De Witt county school district 41, 5 per cent. 10-20s; \$11,378 Presidio county refunding 5 per cent. 5-20s; \$800 Hopkins county school district 88, 5 per cent. 10-20s; \$800 Hopkins county school district 58, 5 per cent. 10-20s; \$900 Houston county school district 29, 5 per cent. 10-20s; \$1000 Houston county school district 43, 5 per cent. 2-20s; \$10,000 city of Liberty schoolhouse 5 per cent. 5-40s; \$13,500 Lockney independent schoolhouse 5 per cent. 20-40s; \$1200 Glasscock county school district 2, 5 per cent. 10-20s; \$800 Houston county school district 1½, 5 per cent. 5-20s; \$1300 Houston county school district 7, 5 per cent. 20s; \$100,000 Galveston seawall improvement bonds, 5 per cent. 20-40s; \$5000 Groesbeck independent school district 5 per cent. 5-40s; \$500 Lavaca county, district 39, schoolhouse bonds, 5 per cents, 5-20s; \$2500 Hardin county schoolhouse 5 per cent. 10-20s; \$1500 district 54 and \$1000 district 68, Tarrant county schoolhouse 5 per cents, 15-year; \$800 district 6, Comanche county schoolhouse 5 per cents, 10-year; \$3000 district 11, Limestone county, 5 per cents, 20-year; \$3800 district 5, 5 per cent. 20-40s, and \$3000 district 8, 5 per cent. 15-year, schoolhouse bonds of El Paso county.

Tex., Ballinger.—Election is ordered for September 17 in Road Precinct No. 1 of Runnels county for \$60,000 of road-improvement bonds. It includes Ballinger.

Tex., Bay City.—\$3500 of 5 per cent. 20-year school bonds of this (Matagorda) county are reported registered.

Tex., Beeville.—Precinct No. 8 of Bee county is reported to have voted \$25,000 of road bonds.

Tex., Beeville.—Official: Good-roads bonds in Bee county were voted recently thus: Precinct No. 1, \$100,000; precinct No. 2, \$25,000. County Judge W. W. Dodd will have charge whenever they are issued. Dan Troy is Court Clerk.

Tex., Belton.—\$10,000 of 5 per cent. 20-40 school-building bonds of district 66 in Bell

county are reported sold at par to the Michigan Trust Co. of Grand Rapids, Mich.

Tex., Bryan.—Reported that the \$33,000 of 4 per cent. 20-40-year water, light and sewer bonds offered August 19 were not sold.

Tex., Buckburnett.—The \$16,000 of 10-40 school-buildings bonds offered by Buckburnett independent school district are reported not yet awarded.

Tex., Ennis.—\$12,000 of water-works bonds are reported to have been recently sold.

Tex., Canadian.—Reported that \$5000 of 5 per cent. 20-40-year street-improvement bonds, denomination \$1000, are being offered at par and interest.

Tex., Corpus Christi.—J. T. Sluder of San Antonio is reported to have bought the \$75,000 of 5 per cent. bonds of Corpus Christi independent school district, registered May 5.

Tex., Cooper.—\$8000 of 5 per cent. 20-40-year school bonds are reported sold at par to the sinking fund of this (Delta) county.

Tex., Gainesville.—Reported that the Thos. J. Bolger Company of Chicago was the successful bidder for the \$125,000 of 4 per cent. bonds of Cooke county, and not E. H. Rollins & Sons of Denver and the Austin National Bank as previously reported.

Tex., Grapeland.—Official: Just incorporated for school purposes. Expect to vote on bonds for new building, probably after January 1. George E. Darsey is president of the board.

Tex., Richmond.—\$2000 of school-building bonds are reported sold.

Tex., Marlin.—Official: The report that Falls county has voted \$18,000 of bonds to rebuild Highbank bridge is an error. The Commissioners' Court has only called an election for October 1 on the proposition. W. E. Hunsicutt is county judge.

Tex., San Marcos.—An election is called for October 18 in Road Precinct No. 1 of Hays county for \$20,000 of road and bridge bonds.

Tex., Sweet Water.—The Commissioners' Court of this (Nolan) county has called an election for September 24 in the road district around Sweet Water to vote on \$100,000 of road improvement bonds.

Tex., Terrell.—Terrell citizens have voted to issue \$10,000 of water and light improvement bonds. A previous election held several months ago was declared illegal because of insufficient notice.

Tex., Tioga.—Official: \$10,000 of 5 per cent. 40-year water-works bonds were voted August 20. J. L. Webb is Mayor.

Tex., Waxahachie.—\$555,000 of road bonds of Ellis county have been approved by the Attorney-General, and they will probably be offered for sale about October 19. They are 5 per cent. 10-40s, and are issued by districts thus: Ennis, \$225,000; Italy, \$105,000; Midlothian, \$85,000; Red Oak, \$70,000; Milford, \$45,000; Maypearl, \$25,000.

Va., Orange.—The \$10,000 of 5 per cent. 15-20-year water-works bonds are reported sold at par to the National Bank of Orange.

Va., Norfolk.—City is reported to have sold at par to J. P. Andre Mottu \$25,000 of 4½ per cent. 30-year improvement bonds, making a total of \$116,000 disposed of out of the issue of \$858,000, \$81,000 having been taken by the sinking fund and \$10,000 were previously reported sold.

Va., Chatham.—\$10,000 of 5 per cent. 30-year street-improvement and school-addition bonds are being offered until September 5; denomination \$500; dated September 1. W. M. Tredway, Jr., is Clerk of Council.

Va., Portsmouth.—Reported that the \$20,000 (total of three issues) of 4½ per cent. 30-year bonds offered without sale on June 30 will probably be again offered about January 1.

Va., Suffolk.—Reported that \$20,000 of refunding bonds are to be issued under a recent ordinance.

W. Va., Keyser.—The \$20,000 of 5½ per cent. water-works improvement bonds are reported sold to the Citizens' Trust & Guaranty Co. of Parkersburg, W. Va., at 103.61.

At Yukon, Okla., bids are being received until Monday, September 5, for \$20,000 of water-works and \$10,000 of sewer 6 per cent. 25-year bonds. Further particulars will be found in the advertising columns.

The Temple Northwestern Railway Co. is offering \$450,000 of 5 per cent. first mortgage gold bonds, registered, on 25 miles of completed railroad out of Temple, Tex. Further particulars will be found in the advertising columns.

At Chatham, Va., bids will be received until September 5 for \$10,000 of 5 per cent. 20-year street improvement and school addition bonds. Further particulars will be found in the advertising columns.

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